Author Index

Abe I, *see* Tsuchihashi, 495
Abe M, *see* Sumimoto, 425
Adaikan G, Beatch GN, Lee TL, Ratnam SS, Walker MJA. Antiarrhythmic actions of tedisamil: studies in rats and primates, 345
Ahmed JH, Elliott HL, Meredith PA, Reid JL. Low-dose verapamil in middle-aged and elderly patients with angina pectoris: no evidence of increased susceptibility to the cardiac effects, 153
Alfieri O, *see* Ferrari, 287
Aliot E, *see* Brembilla-Perrot, 187
Ambrosio G, Flaherty JT. Effects of the superoxide radical scavenger superoxide dismutase, and of the hydroxyl radical scavenger mannitol, on reperfusion injury in isolated rabbit hearts, 623
Amery A, Birkenhäger WH, Fagard R, Staessen J, Thijs L, De Leeuw PW. Editorial: treatment of the older hypertensive: paradigms, practices, and proofs, 565
Amory DW, *see* Zakzewski, 589
Anderson RH (ed), *see* Sutherland, 452
Angoli L, *see* Ghio, 255
Apostolou T, *see* Kyriakides, 475
Apstein CS, *see* Foster, 147
Arakawa K, *see* Handa, 85
Arakawa K, *see* Mori, 387
Arakawa K, *see* Sasaki, 471
Arita M, *see* Saikawa, 539

Baas NRA, *see* van Woerkens, 409
Battinelli NJ, *see* Foster, 147
Baudouy M, *see* Gibelin, 373
Beatch GN, *see* Adaikan, 345
Bergfeldt L, Schenck-Gustafsson K, Dahlqvist R. Comparative class I electrophysiologic and anticholinergic effects of disopyramide and its main metabolite (Mono-N-dealkylated disopyramide) in healthy humans, 529
Bernard SA, *see* Foster, 147
Birkenhäger WH, *see* Amery, 565
Birkhead J, *see* Cowley, 465
Björk H, *see* Pettersson, 505
Blanc P, *see* Gibelin, 373
Bleifeld W, *see* Erlemeier, 391
Bokor D, *see* Fogari, 249
Bolognesi R, Tsialtas D, Manca C. Digitalis and heart failure: does digitalis really produce beneficial effects through a positive inotropic action?, 459
Bonandi L, Metra M, Niccoli L, Ettori F, Nodari S, Dei Cas L, Visioli O. Combined invasive and noninvasive study of left ventricular systolic and diastolic function following acute administration of cicloprolol to subjects with normal cardiac function, 513
Boraso A, *see* Cargnoni, 209
Borgers M, *see* Ravens, 47
Bossan S, *see* Gibelin, 373
Boucher F, Coudray C, Favier A, de Leiris J. Stimulation of peroxidative reactions by a high dose of allopurinol in the rat myocardium, 541
Bramucci E, *see* Ghio, 255
Braunwald E (ed). Heart disease. A textbook of cardiovascular medicine, 4th edition (book review), 546
Brembilla-Perrot B, Aliot E, Clementy J, Cosnay P, Djiane P, Fauchier JP, Kacet S, Lellouche D, Mabo P, Richard M, Victor J. Evaluation of bepridil efficacy by electrophysiologic testing in patients with recurrent ventricular tachycardia: comparison of two regimes, 187
Brenner DM, *see* Laragh, 93
Bruce R, *see* Crook, 633
Brusselmans F, *see* Duprez, 399
Burke E, *see* McAleer, 369

Camici PG, *see* Uren, 273
Campbell TJ. Subclassification of class I antiarrhythmic drugs: enhanced relevance after CAST, 519
Capuana G, *see* Scaglione, 141
Cargnoni A, Condorelli E, Boraso A, Comini L, De Giuli F, Pasini E, Ferrari R. Role of timing of administration in the cardioprotective effect of fructose-1, 6-bisphosphate, 209
Carlier E, *see* Deguate, 489
Carmeliet E. Potassium channels in cardiac cells, 305
Cathcart M, *see* McAleer, 369
Chester A, *see* Mankad, 77
Clement DL, *see* Duprez, 399
Clementy J, *see* Brembilla-Perrot, 187
Coetzee WA. ATP-sensitive potassium channels and myocardial ischemia: why do they open?, 201
Comini L, *see* Cargnoni, 209
Commerford PJ, *see* Wilson, 41
Condorelli E, *see* Cargnoni, 209
Cordis GA, *see* Liu, 437
Corradi L, *see* Fogari, 249
Corradi L, *see* Fogari, 543
Cosentino F, Schirger A, Katusic ZS. HN-10200 causes endothelium-independent relaxations in isolated canine arteries, 159
Cosnay P, *see* Brembilla-Perrot, 187
Costello A, *see* McAleer, 369
Coudray C, *see* Boucher, 541
Cowley AJ, Wynne RD, Swami A, Birkhead J, Skene A, Hampton JR. A comparison of the effects of captopril and flosequinan in patients with severe heart failure, 465
Crook D, Bruce R, Wothington M, Mulcahy D, Patterson D, Wynn V. Effect of simvastatin on high density lipoprotein subfractions and apolipoproteins in type IIa hypercholesterolemia, 633

Dahlqvist R, *see* Bergfeldt, 529
Dalton G, *see* McAleer, 369
Daly B, *see* Sullivan, 261
Das DK, *see* Liu, 437
De Buyzere M, *see* Duprez, 399
Deckmyn H, *see* Vermylen, 29
De Giuli F, *see* Cargnoni, 209
Deguate JP, Leeman M, Reuse C, Carlier E, Schoutens A, Vandepapeliere P. Acute and chronic effects of lisinopril on renal and systemic hemodynamics in hypertension, 489
Dei Cas L, *see* Bonandi, 513
De Leeuw PW, *see* Amery, 565
De Leiris J, *see* Boucher, 541
De Servi S, *see* Ghio, 255
Dietz R, *see* Osterziel, 173
Di Minno G, Mancini M. Drugs affecting plasma fibrinogen levels, 25
Djiane P, *see* Brembilla-Perrot, 187
Duchosal F, Opie LH. Potential beneficial effects of potassium channel blockade by tedisamil in isolated perfused working rat heart with coronary artery ligation, 329
Dukes ID, Morad M. The mode of action of tedisamil on voltage-dependent K^+ channels, 321
Duprez D, De Buyzere M, Brusselmans F, Maas A, Clement DL. Comparison of lisinopril and nitrendipine on the pulsatility index in mild essential arterial hypertension, 399

Eleuteri E, *see* Ghio, 255
Elliott HL, *see* Ahmed, 153
Engleman RM, *see* Liu, 437

Engler MB. Vascular relaxation to omega-3 fatty acids: comparison to sodium nitroprusside, nitroglycerin, papaverine, and D 600, 605
Erlemeier HH, Kupper W, Bleifeld W. Intermittent infusion of dobutamine in the therapy of severe congestive heart failure—long-term effects and lack of tolerance, 391
Ettori F, *see* Bonandi, 513

Fagard R, *see* Amery, 565
Fauchier JP, *see* Brembilla-Perrot, 187
Favier A, *see* Boucher, 541
Ferrari R, La Canna G, Guibbini R, Alfieri O, Visioli O. Hibernating myocardium in patients with coronary artery disease: identification and clinical importance, 287
Ferrari R, *see* Cargnoni, 209
Fischer G, *see* Raberger, 337
Flaherty JT, *see* Ambrosio, 623
Fogari R, Malamani GD, Zoppi A, Lazzari P, Tettamanti F, Mugellini A, Corradi L. Effects of celiprolol on cardiovascular responses to smoking in normotensive smokers, 543
Fogari R, Zoppi A, Corradi L, Pasotti C, Malamani G Domenico, Gradnik R, Bokor D, Gala C. Comparison of bisoprolol and diazepam in the treatment of cardiac neurosis, 249
Foster E, Plehn JF, Bernard SA, Battinelli NJ, Huntington-Coats M, Apstein CS. Regression of left ventricular hypertrophy in "previously untreated" hypertensive blacks after six months of blood pressure reduction with alpha- and beta-adrenergic blockade and thiazide therapy, 147
Fox K, *see* Mulcahy, 125
Fraser AG (ed), *see* Sutherland, 452
Frohlich ED, *see* Isshiki, 91
Fujino T, *see* Saikawa, 539
Fujishima M, *see* Tsuchihashi, 495
Fujiwara Y, *see* Sumimoto, 425

Gagnon R, *see* Smith, 499
Gala C, *see* Fogari, 249
Galton D, Krone W (eds). Hyperlipidaemia in practice (book review), 451
Ganguzza A, *see* Scaglione, 141
Genade S, *see* Lochner, 447
Ghio S, De Servi S, Angoli L, Bramucci E, Eleuteri E, Raffaghello S, Specchia G. Similar antiischemic effects of intracoronary atenolol and nifedipine during brief coronary occlusions in humans, 255
Gibelin P, Tiger F, Moles V, Bossan S, Blanc P, Baudouy M, Morand P. Influence of the rt-PA dose (1 mg/kg versus 1.5 mg/kg) and duration of administration on the patency of infarct-related coronary arteries in 81 patients, 373
Gjesdal K, *see* Klemsdal, 641
Gradnik R, *see* Fogari, 249
Grohs JG, *see* Raberger, 337
Gross GJ, Pieper GM. Beneficial actions of amlodipine in the multiple-stunned canine myocardium, 67
Gross GJ, *see* Pieper, 225
Guibbini R, *see* Ferrari, 287
Guo-shu L, *see* Ravens, 47
Guth BD. Reduction of exercise-induced regional contractile dysfunction in dogs using a novel calcium channel blocker (Ro 40–5967), 167

Hamada M, *see* Sumimoto, 425
Hamaguchi M, Ishibashi T, Katsumata N, Mitomi A, Imai S. Effects of sodium nitroprusside (MR7S1) and nitroglycerin on the systemic, renal, cerebral, and coronary circulation of dogs anesthetized with enflurane, 611
Hamm CW. Recovery of myocardial function in the hibernating heart, 281
Hampton JR, *see* Cowley, 465
Hanada K, *see* Mori, 387
Handa K, Mori T, Tanaka H, Takada Y, Matsunaga A, Kiyonaga A, Shindo M, Sasaki J, Arakawa K. Administration of slow-release nifedipine does not affect lactate threshold, hormone release during exercise, and quality of life in normal subjects, 85
Handa K, *see* Sasaki, 471
Hansen O, Johansson BW. Effects of hydrochlorothiazide, amiloride, and lisinopril on the metabolic response to adrenaline infusions in normal subjects, 219
Hara M, *see* Saikawa, 539
Harder K, *see* Osterziel, 173
Hasegawa J, Kitamura H, Mashiba H. Syncope and recurrent long sinus arrest in vasospastic angina, 139
Hata N, *see* Kishida, 481
Hiwada K, *see* Sumimoto, 425
Holme I. Cholesterol lowering and the reduction of CHD incidence and total mortality: results from a meta-analysis of randomized trials, 101
Huntington-Coats M, *see* Foster, 147

Ikeda K, *see* Sasaki, 471
Imai S, *see* Hamaguchi, 611
Indovina A, *see* Scaglione, 141
Ishibashi T, *see* Hamaguchi, 611
Ishida S, *see* Saikawa, 539
Isshiki T, Nishikimi T, Uchino K, Kardon MB, Frohlich ED. Diltiazem reduces glomerular pressure in spontaneously hypertensive rats, 91
Ito M, *see* Saikawa, 539

Jasaitis DK, *see* Zakzewski, 589
Johansson BW, *see* Hansen, 219

Kacet S, *see* Brembilla-Perrot, 187
Kanda T, *see* Yokoyama, 403
Kaplan NM. An editorial comment on Dr. Opie's editorial, 563
Karavolias G, *see* Kyriakides, 475
Kardon MB, *see* Isshiki, 91
Karpanou EA, *see* Vyssoulis, 419
Katoh K, *see* Kishida, 481
Katsumata N, *see* Hamaguchi, 611
Katusic ZS, *see* Cosentino, 159
Kawai C. Pharmacotherapy of dilated cardiomyopathy: current status and future directions, 7
Kawasaki K, *see* Sasaki, 471
Kelley W (ed). Textbook of internal medicine, 2nd edition (book review), 545
Kishida H, Hata N, Kunimi T, Miyagawa H, Nishiyama H, Katoh K. Antianginal effects of amlodipine at a single dose on exertional angina patients using treadmill exercise testing—a randomized crossover study in comparison with placebo, 481
Kitamura H, *see* Hasegawa, 139
Kiyonaga A, *see* Handa, 85
Kiyonaga A, *see* Mori, 387
Klemsdal TO, Gjesdal K. The effect of transdermal nitroglycerin on exercise tolerance in relation to patch application time—a meta-analysis, 641
Kobayashi K, *see* Tsuchihashi, 495
Kolomiets VV, *see* Merzon, 137
Kourtis TK, *see* Vyssoulis, 419
Kremastinos D, *see* Kyriakides, 475
Krone W (ed), *see* Galton, 451
Kübler W, *see* Osterziel, 173
Kunimi T, *see* Kishida, 481
Kupper W, *see* Erlemeier, 391
Kyriakides ZS, Kremastinos D, Karavolias G, Papadopoulos C, Apostolou T, Paraskevaidis J, Toutouzas P. Intravenous atenolol in elderly patients in the early phase of acute myocardial infarction, 475

La Canna G, *see* Ferrari, 287
Laragh JH, Brenner DM. Hypertension: pathophysiology, diagnosis, and management, volumes 1 and 2 (book review), 93
Lathrop DA, *see* Yang, 429
Lazdunski M. Potassium channels: structure-function relationships, diversity and pharmacology, 313
Lazzari P, *see* Fogari, 543
Lee TL, *see* Adaikan, 345
Leeman M, *see* Deguate, 489
Lellouche D, *see* Brembilla-Perrot, 187
Li JK-J, *see* Zakzewski, 589
Licata G, *see* Scaglione, 141
Liebrich A, *see* Mitrovic, 353

Lipari R, *see* Scaglione, 141
Liu X, Engleman RM, Rousou JA, Cordis GA, Das DK. Attenuation of myocardial reperfusion injury by sulfhydryl-containing angiotensin converting enzyme inhibitors, 437
Lochner A, Genade S, Mouton R. Massive atrial natriuretic peptide (ANP) release in ischemia reperfusion, 447
Lund-Johansen P. Editorial: treatment of hypertension in the elderly—what have we learned from the recent trials?, 571

Maas A, *see* Duprez, 399
Mabo P, *see* Brembilla-Perrot, 187
McAleer B, Ruane B, Burke E, Cathcart M, Costello A, Dalton G, Williams JR, Varma MPS. Prehospital thrombolysis in a rural community: short- and long-term survival, 369
Maeda T, *see* Saikawa, 539
Malamani G Domenico, *see* Fogari, 249
Malamani GD, *see* Fogari, 543
Mankad P, Spatenka J, Slavik Z, O'Neil G, Chester A, Yacoub M. Acute effects of cyclosporin and cremophor EL on endothelial function and vascular smooth muscle in the isolated rat heart, 77
Manca C, *see* Bolognesi, 459
Mancini M, *see* Di Minno, 25
Mashiba H, *see* Hasegawa, 139
Matsunaga A, *see* Handa, 85
Matsunaga A, *see* Mori, 387
Matsuoka H, *see* Sumimoto, 425
Meredith PA, *see* Ahmed, 153
Merzon KA, Kolomiets VV. Do calcium entry blockers act on circulation ionized calcium?, 137
Metra M, *see* Bonandi, 513
Millar RS, *see* Wilson, 41
Mitomi A, *see* Hamaguchi, 611
Mitrovic V, Oehm E, Liebrich A, Thormann J, Schlepper M. Hemodynamic and antiischemic effects of tedisamil in humans, 353
Miyagawa H, *see* Kishida, 481
Moles V, *see* Gibelin, 373
Morad M, *see* Dukes, 321
Morand P, *see* Gibelin, 373
Morganroth J. Early and late proarrhythmia from antiarrhythmic drug therapy, 11
Mori T, Hanada K, Terao Y, Tanaka H, Kiyonaga A, Shindo M, Matsunaga A, Sasaki J, Arakawa K. Effects of arotinolol on exercise capacity and humoral factors during exercise in normal subjects, 387
Mori T, *see* Handa, 85
Moser M. Editorial: treatment of hypertension in the elderly, 575
Mouton R, *see* Lochner, 447
Mugellini A, *see* Fogari, 543
Mulcahy D, Fox K. Can we really justify the treatment of silent ischaemia in 1992? No!, 125
Mulcahy D, *see* Crook, 633
Mulé L Giulio, *see* Scaglione, 141
Muller CA, Opie LH, Pineda CA, Peisach M. Bucindolol, a beta-blocker, decreased ventricular fibrillation and maintained mechanical function in a pig-model and acute myocardial ischemia, 233
Murata K, *see* Yokoyama, 403

Nakagawa M, *see* Saikawa, 539
Niccoli L, *see* Bonandi, 513
Nishikimi T, *see* Isshiki, 91
Nishiyama H, *see* Kishida, 481
Nodari S, *see* Bonandi, 513

O'Connor R, *see* Sullivan, 261
Oehm E, *see* Mitrovic, 353
Ohtani T, *see* Sumimoto, 425
Oliver MF. Cholesterol and coronary disease—outstanding questions, 131
O'Neil G, *see* Mankad, 77
Opie LH. Choice of ACE inhibitor for congestive heart failure: editorial comment, 181
Opie LH. Editorial: treatment of hypertension in the elderly—the end of the story?, 559
Opie LH. Introduction to symposium, 303
Opie LH. Should calcium antagonists be used after myocardial infarction? Ischemia selectivity versus vascular selectivity, 19
Opie LH, *see* Duchosal, 329
Opie LH, *see* Muller, 233
Opie LH, *see* Wilson, 41
Opie LH, *see* Worthington, 597
Osterziel KJ, Dietz R, Harder K, Kubler W. Comparison of captopril with enalapril in the treatment of heart failure: influence on hemodynamics and measures of renal function, 173

Paleologos AA, *see* Vyssoulis, 419
Paoletti R, *see* Spedding, 35
Papadopoulos C, *see* Kyriakides, 475
Paraskevaidis J, *see* Kyriakides, 475
Parrinello G, *see* Scaglione, 141
Pasini E, *see* Cargnoni, 209
Pasotti C, *see* Fogari, 249
Patterson D, *see* Crook, 633
Peisach M, *see* Muller, 233
Pettersson K, Björk H. Inhibition of platelet accumulation by beta$_1$-adrenoceptor blockade in the thoracic aorta of rabbits subjected to experimental sympathetic activation, 505
Pieper GM, Gross GJ. Anti-free radical and neutrophil-modulating properties of the nitrovasodilator, nicorandil, 225
Pieper GM, *see* Gross, 67
Pineda CA, *see* Muller, 233
Pitsavos CE, *see* Vyssoulis, 419
Plehn JF, *see* Foster E, 147

Raberger G, Grohs JG, Fischer G. Antiischemic effects of tedisamil in conscious dogs, 337
Raffaghello S, *see* Ghio, 255
Rahimtoola SH, *see* Tubau, 267
Ratnam SS, *see* Adaikan, 345
Ravens U, Guo-shu L, Vandeplassche G, Borgers M. Protection of human, rat and guinea-pig atrial muscle by mioflazine, lidoflazine, and verapamil against the destructive effects of high concentrations of Ca^{2+}, 47
Refsum H, *see* Yang, 429
Reid JL, *see* Ahmed, 153
Reuse C, *see* Deguate, 489
Richard M, *see* Brembilla-Perrot, 187
Robertson JIS. Editorial: the case for antihypertensive drug treatment in subjects over the age of 60, 579
Roelandt JRTC (ed), *see* Sutherland, 452
Rousou JA, *see* Liu, 437
Ruane B, *see* McAleer, 369
Russell DW. Cholesterol biosynthesis and metabolism, 103

Saeki Y, *see* Sasaki, 471
Safar ME. Editorial: hypertension in the elderly, 585
Saikawa T, Nakagawa M, Takahashi N, Ishida S, Fujino T, Ito M, Shimoyama N, Hara M, Yonemochi H, Maeda T, Takaki R, Arita M, Tsumabuki S. The new analysis of the actions of anti-arrhythmic drugs based on the heart rate dependency of ventricular premature contractions, 539
Sasaki J, Saeki Y, Kawasaki K, Umeno M, Ikeda K, Handa K, Arakawa K. A multicenter comparison of nicorandil and diltiazem on serum lipid apolipoprotein, and lipoprotein levels in patients with ischemic heart disease, 471
Sasaki J, *see* Handa, 85
Sasaki J, *see* Mori, 387
Sasayama S. What do the newer inotropic drugs have to offer?, 15
Scaglione R, Indovina A, Parrinello G, Lipari R, Mulé L Giulio, Ganguzza A, Capuana G, Stampino C Gallo, Licata G. Antihypertensive efficacy and effects of nitrendipine on cardiac and renal haemodynamics in mild to moderate hypertensive patients: randomized controlled trial versus hydrochlorothiazide, 141

Schenk-Gustafsson K, *see* Bergfeldt, 529
Schirger A, *see* Cosentino, 159
Schlemmer M, *see* Wimmer, 183
Schlepper M, *see* Mitrovic, 353
Schoutens A, *see* Deguate, 489
Sekiya M, *see* Sumimoto, 425
Shimoyama N, *see* Saikawa, 539
Shindo M, *see* Handa, 85
Shindo M, *see* Mori, 387
Skene A, *see* Cowley, 465
SK&F Fenoldopam Working Group. Effects of intravenous fenoldopam (SK&F 82526–J) on blood pressure in severe hypertension, 445
Slavik Z, *see* Mankad, 77
Slivjak MJ, *see* Smith, 499
Smith EF III, Slivjak MJ, Gagnon R. Single and repeated doses of the vasodilator/beta$_1$-adrenergic antagonist, carvedilol, block cirazoline-and isoproterenol-mediated hemodynamic responses in the conscious rat, 499
Spatenka J, *see* Mankad, 77
Specchia G, *see* Ghio, 255
Spedding M, Paoletti R. Classification of calcium channels and calcium antagonists: progress report, 35
Staessen J, *see* Amery, 565
Stampino C Gallo, *see* Scaglione, 141
Sullivan PA, Daly B, O'Connor R. Enalapril versus combined enalapril and nadolol treatment: effects on blood pressure, heart rate, humoral variables and plasma potassium at rest and during exercise in hypertensive patients, 261
Sumimoto T, Hamada M, Ohtani T, Suzuki M, Abe M, Matsuoka H, Fujiwara Y, Sekiya M, Hiwada K. Effect of disopyramide on left ventricular diastolic function in patients with hypertrophic cardiomyopathy: comparison with diltiazem, 425
Sutherland GR, Roelandt JRTC, Fraser AG, Anderson RH (eds). Atlas of transesophageal echocardiography (book review), 452
Suzuki M, *see* Sumimoto, 425
Suzuki T, *see* Yokoyama, 403
Swami A, *see* Cowley, 465

Takada Y, *see* Handa, 85
Takahashi N, *see* Saikawa, 539
Takaki R, *see* Saikawa, 539
Tanaka H, *see* Handa, 85
Tanaka H, *see* Mori, 387
Tande PM, *see* Yang, 429
Terao Y, *see* Mori, 387
Tettamanti F, *see* Fogari, 543
Thijs L, *see* Amery, 565
Thormann J, *see* Mitrovic, 353
The TIBET Study Group. The Total Ischemic Burden European Trial (TIBET): design, methodology, and management, 379
Tiger F, *see* Gibelin, 373
Toutouzas P, *see* Kyriakides, 475
Toutouzas PK, *see* Vyssoulis, 419
Tsialtas D, *see* Bolognesi, 459
Tsuchihashi T, Abe I, Tsukashima A, Kobayashi K, Ueno M, Fujishima M. Comparison of effects of enalapril and captopril on serum potassium concentration in the treatment of malignant hypertension, 495
Tsukashima A, *see* Tsuchihashi, 495
Tsumabuki S, *see* Saikawa, 539
Tubau JF, Rahimtoola SH. Hibernating myocardium: an historical perspective, 267

Ueno M, *see* Tsuchihashi, 495
Uchino K, *see* Isshiki, 91
Umeno M, *see* Sasaki, 471
Uren NG, Camici PG. Hibernation and myocardial ischemia: clinical detection by positron emission tomography, 273

Van Baak MA, *see* Van Bortel, 239
Van Bortel LMAB, van Baak MA. Exercise tolerance with nebivolol and atenolol, 239
Vandepapeliere P, *see* Deguate, 489
Vandeplassche G, *see* Ravens, 47
Van der Giessen WJ, *see* van Woerkens, 59
Van der Giessen WJ, *see* van Woerkens, 409
Van Woerkens LJ, Baas NRA, van der Giessen WJ, Verdouw PD. Cardiovascular effects of the novel potassium channel opener bimakalim in conscious pigs after myocardial infarction: a comparative study with nicorandil, 409
Van Woerkens LJ, van der Giessen WJ, Verdouw PD. The selective bradycardic effects of zatebradine (UL-FS49) do not adversely affect left ventricular function in conscious pigs with chronic artery occlusion, 59
Varma MPS, *see* McAleer, 369
Verdouw PD, *see* van Woerkens, 59
Verdouw PD, *see* van Woerkens, 409
Vermylen J, Deckmyn H. Thromboxane synthase inhibitors and receptor antagonists, 29
Verstraete M. Advances in thrombolytic therapy, 111
Victor J, *see* Brembilla-Perrot, 187
Visioli O, *see* Bonandi, 513
Visioli O, *see* Ferrari, 287
Vyssoulis GP, Karpanou EA, Pitsavos CE, Kourtis TK, Paleologos AA, Toutouzas PK. Comparison of ketanserin and celiprolol on regression of left ventricular hypertrophy in older hypertensive patients, 419

Walker MJA, *see* Adaikan, 345
William JR, *see* McAleer, 369
Wilson J, Commerford PJ, Millar RS, Opie LH. Hemodynamic effects of nisoldipine, a highly specific calcium antagonists, in patients with acute myocardial infarction, 41
Wimmer M, Schlemmer M. Long-term haemodynamic effects of nifedipine on congenital heart disease with Eisenmenger's mechanism in children, 183
Worthington M, *see* Crook, 633
Worthington MG, Opie LH. Effects of calcium channel agonism by Bay-K-8644 on ventricular fibrillation threshold of isolated heart, 597
Wynne RD, *see* Cowley, 465
Wynn V, *see* Crook, 633

Yacoub M, *see* Mankad, 77
Yang T, Tande PM, Lathrop DA, Refsum H. Effects of altered extracellular potassium and pacing cycle length on the class III antiarrhythmic actions of dofetilide (UK-68,798) in guinea-pig papillary muscle, 429
Yokoyama T, Kanda T, Suzuki T, Murata K. Effects of lobenzarit on murine acute viral myocarditis, 403
Yonemochi H, *see* Saikawa, 539

Zakzewski CA, Amory DW, Jasaitis DK, Li JK-J. Iontophoretically enhanced transdermal delivery of an ACE inhibitor in induced hypertensive rabbits: preliminary report, 589
Zoppi A, *see* Fogari, 249
Zoppi A, *see* Fogari, 543

Subject Index

Acetylcholine
  effect on action potential duration, 309–310
  potassium channel activation, 314
Acidosis, effect on ATP-dependent potassium channels, 202
Action-potential duration (APD)
  as function of basic cycle lengths of stimulation, 309–310
  lengthening by dofetilide (UK-68,798), 429, 431, 432, 433
  lengthening by drugs in class 1A, 520, 521, 523–524, 525, 526
  prolonged by tedisamil, 329, 335
Action potentials
  ischemia-induced shortening, 314–315
  plateau, 305, 306, 308
  repolarization process and potassium channel involvement, 305–311
  spike-dome appearance, and prolongation, 308–309, 310
Action-potential shortening
  ATP-sensitive potassium channels and myocardial ischemia, 201, 204, 206
Activated coagulation factor X, 118
Activation kinetics, tedisamil effect on potassium (K^+) channels (voltage-activated), 321–327
Acute myocardial infarction
  atenolol (IV) in elderly in early phase, 475–478
  digitalis therapy, 461
  nisoldipine hemodynamic effects, 41–45
  rt-PA dose influence and duration of therapy, 373–377
Acute-phase response, plasma fibrinogen levels, 26
Acyl cholesterol acyl transferase (ACAT) enzyme, 106
Adenosine, effect on ATP-sensitive potassium channels, 202
Adenosine monophosphate (AMP), insignificant role (cyclic) with Bay-K-8644, 602
Adenosine triphosphate (ATP)
  and mitochondrial respiration in hibernating myocardium, 268, 269–270
  potassium channel sensitivity, 314–315
Adenosine triphosphate (ATP)-sensitive potassium channels
  current carried, 204
  effects on ischemic potassium efflux and arrhythmias, 205–206
  and myocardial ischemia, 201–206
  open probability (PO), 203
  pharmacological modulation, 204–206
Adrenaline, infusions, and metabolic response effects of hydrochlorothiazide, amiloride, and lisinopril, 219–223
Afterdepolarizations, calcium-dependency and origination, 21, 22
Age
  antihypertensive therapy, 565–568
  atenolol (IV) in early phase of acute myocardial infarction, 475–478
  and cholesterol, 134
  effect on verapamil therapy for angina pectoris, 153–158
  hypertension and drug therapy, 586
  related to nifedipine effect in children with congenital heart disease and Eisenmenger's mechanism, 183, 184, 185
Agranulocytosis, incidence in patients treated with OPC-8212, 18
Alcohol, affecting plasma fibrinogen levels, 25, 26
Aldosterone levels, after nifedipine-C dosing, 88
Alinidine
  heart-rate reduction, 303
  as sinus-node inhibitor, 337, 341
  vs. tedisamil for myocardial ischemia, 361, 362
  vs. tedisamil in rat hearts with coronary ligation, 329–335
  vs. UI-FS 49, 63, 64
Allopurinol, to stimulate peroxidative reactions in rat myocardium, 541–542
Alpha-adrenergic agonists, for chronic heart failure, 16
Alpha-adrenergic blocker, carvedilol effect on cirazoline- and isoproterenol-mediated hemodynamic responses in rats, 499–503
Alpha blockers, elderly and hypertension, 571, 572
Alpha-methyldopa, decrease in LV mass during therapy, 150
Alteplase
  accelerated infusion, 112
  after myocardial infarction, 119
  bolus administration, 111–112
  combined IV administration with saruplase, 112
  combined IV administration with streptokinase, 112
  combined IV administration with urokinase, 112
  concomitant treatment with high-dose IV heparin, 115
  fibrin specificity, 113–114
  hybrids, 113
  -induced reperfusion enhanced by ridogrel, 117
  and platelet inhibition, 116
  thrombus-targeted (conjugate) drugs, 114
  vs. bat saliva, 113–114
  with beraprost, 118
  with iloprost, 118
Ambulatory blood pressure monitoring, atenolol vs. nebivolol effect in hypertensive patients, 239
Ambulatory ST-segment monitoring, and silent ischemia, 125, 126, 127, 128
Amiloride
  effect on metabolic response to adrenaline infusions, 219–223
  elderly and hypertension, 571, 572, 581
Amiodarone
  classification, 524, 525, 526
  lipid solubility high, 525
  potassium channel activation, 317
  with ACE-inhibitor therapy, 174
Amlodipine, 38
  antianginal effects on exertional angina patients, 481–486
  beneficial actions in the multiple-stunned canine myocardium, 67–75
  chemical structure, 68
  effects similar to those of nitrendipine, 145
Amrinone, for chronic heart failure, 16
Anaerobiosis, and metabolism of myocardial hibernation, 274
Angina pectoris
  associated with hibernating myocardium, 267–268
  monotherapy vs. combination therapy of atenolol with nifedipine, 379–384
  nicorandil and diltiazem effects, 472
  nicorandil's anti-free-radical and neutrophil-modulating properties, 225
  nifedipine effect on serum level of Ca^{2+}, 137
  nisoldipine effect, 45
  stable, and zatebradine bradycardic effects on left ventricular function, 62
  stable effort, and IC nifedipine vs. atenolol during PTCA, 256, 257
  tedisamil therapy, 303
  verapamil effect on serum level of Ca^{2+}, 137
  verapamil therapy in middle-aged and elderly patients, 153–158
Angiotensin (ANGII), nifedipine-C effect on response, 88

Angiotensin converting enzyme inhibitors
beneficial effects against myocardial ischemic-reperfusion injury, 437–442
captopril vs. enalapril for heart failure treatment, 173–179
captopril vs. flosequinan alternatives for severe heart failure, 465–470
conflicts with Dr. Opie's editorial and treatment recommendations for elderly hypertensives, 563–564
decrease in LV mass during therapy, 150
early after myocardial infarction, 119
effects on myocardial high-energy phosphates, 440
elderly and hypertension, 560, 568, 571, 576
enalapril vs. captopril effect on serum potassium concentration in hypertension, 495–498
enalapril vs. enalapril with nadolol therapy, 261–264
exercise capacity, 396
for congestive heart failure, choice of, 181
lisinopril effect on metabolic response to adrenaline infusions, 219–223
transdermal delivery in hypertensive rabbits, 589–594
vs. nebivolol for exercise endurance capacity, 244–245
Anipamil, 38
Anistreplase., 111
Anthracycline cardiomyopathy, digitalis therapy doubtful or useless, 460
Antianginal agents, amlodipine, using treadmill exercise testing, 481–486
Antiarrhythmic actions, tedisamil studies in rats and primates, 345–351
Antiarrhythmic drugs
actions based on heart rate dependency of ventricular premature contractions, 539
causing early and late proarrhythmia, 11–14
clofilium, inhibition of IsK potassium channel, 317
risks, 11
subclassification of Class I after CAST study, 519–526
Anticholinergic effect, disopyramide and its main metabolite in healthy humans, 529–537
Antihypertensive therapy
elderly and use of diuretics and beta blockers, 571–573
elderly patients and treatment paradigms, practices, and proofs, 565–568
Antiplatelet therapy, 29–31
Antistasin, 118
Antiviral agents, immunosuppressive treatment in acute myocarditis, 7, 8–9
Aorta, platelet accumulation inhibited by beta blockade in rabbits, 505–510
Apolipoprotein B, 106
Apolipoprotein E, 106
Apolipoproteins (apo)
nicorandil and diltiazem effect in ischemic heart disease patients, 471–473
simvastatin effect in type IIa hypercholesterolemia, 633–638
Aprindine, classification, 525
Arachidonic acid, 29, 31, 316
Argatroban (MCI-9038)
as synthetic thrombin inhibitor, 116
Arotinolol, effect on normal subjects, 387–390
Arrhythmias, incidence and severity 0–30 minutes after coronary artery occlusion and tedisamil in rats, 349
Arrhythmogenesis, 11
Arterial blood pressure, carvedilol effect on cirazoline- and isoproterenol-mediated hemodynamic responses in rats, 499–503
Arterial hypertension
lisinopril vs. nitrendipine on pulsatility index, 399
nitrendipine vs. lisinopril on pulsatility index, 399
Arterial wall, degeneration and hypertension in the elderly, 585–587
Aspirin
after coronary or peripheral artery bypass surgery, 116
and platelet inhibition with thrombolytic drugs, 111, 116
of proven benefit for unstable angina, myocardial infarction and cerebrovascular disease patients, 116
reduction of new vascular complications in patients with symptomatic arterial disease, 29, 30, 31
with cicaprost, 118
with ticlopidine for combined antithrombotic prevention, 117
Asthma, and beta-blockade, 19
Atenolol
altering circadian pattern of ischemic episodes, 379
analgesic properties in acute myocardial infarction, 258
antianginal and antiischemic effects, 379
elderly and hypertension, 559–560, 571–572, 580–581
exercise tolerance effect vs. that of nebivolol, 239–246
intracoronary antiischemic effects vs. those of nifedipine during coronary occlusions, 255–259
suppression of ventricular premature contractions, 539
transient repolarization changes during IC administration, 259
with nifedipine, antianginal and antiischemic effects, 379–384
Atheroma, and cholesterol and lipids, 131–132, 134
Atheromatous vascular disease, 134
Atherosclerosis
effects of lipid-lowering drugs, 132
endothelium relaxing factor and nitric oxide, 119
and omega-3 fatty acids, 609
Atherosclerotic cardiovascular disease, plasma fibrinogen levels and risk factors, 25, 26
Atrial natriuretic peptide (ANP)
increased by exercise after arotinolol treatment, 387, 388
nifedipine effect and exercise, 88, 89
release in ischemia reperfusion, 447–448
Atropine, and sick sinus syndrome, 139
Atropine standard, disopyramide and its main metabolite effects in healthy humans, 529–537
Australian study, elderly and hypertension, 561, 566, 575, 576
Autoregulation, cholesterol biosynthesis and metabolism, 103–109

Baboons
tedisamil's antiarrhythmic actions studied, 345–351
tedisamil's lengthening of action-potential duration, 335
BASIS study, 526
Bat saliva, plasminogen activator from, 111, 113–114
Bay-K-8644
effect on ventricular fibrillation threshold, 597–603
for chronic heart failure, 16
Bee-venom toxin apamin, 315
Benzodiazepines, for cardiac neurosis, 249–253
Benzothiazepines, 38
Bepridil, 38
adverse effects when given for ventricular tachycardia, 190
efficacy evaluation with recurrent ventricular tachycardia, 187–192
increasing regional segment shortening, 67, 74
Beraprost, 118
Beta-adrenergic agonist, hemodynamic benefits short-term for advanced heart failure patients, 15, 16–17
Beta-adrenergic blocker
atenolol (IV) in elderly in early phase of acute myocardial infarction, 475–478
carvedilol effect on cirazoline- and isoproterenol-mediated hemodynamic responses in rats, 499–503
dilated cardiomyopathy patients improved with therapy, 7–8
no evidence of a late proarrhythmic response, 11, 13

Beta-adrenoceptor blockade, heart rate increases and bimakalim effects in pigs, 416
Beta-Blocker in Heart Attack Trial (BHAT), 128
Beta blockers
  analgesic properties in acute myocardial infarction, 258, 259
  arotinolol effect on normal subjects, 387–390
  atenolol (IV) in elderly in early phase of acute myocardial infarction, 475–478
  bucindolol effect on ventricular fibrillation and myocardial ischemia, 233–236
  celiprolol effects on cardiovascular responses to smoking, 543–544
  conflicts with Dr. Opie's editorial and treatment recommendations for elderly hypertensives, 563–564
  decrease in LV mass during therapy, 150
  elderly and hypertension, 571–572
  enalapril vs. enalapril with nadolol therapy, 261–264
  exercise capacity effect, 239, 243–246
  for cardiac neurosis, 249–253
  inhibiting platelet accumulation in thoracic aorta of rabbits, 505–510
  suppressant effect on silent ischemic episodes, 379, 384
  vs. calcium antagonist nisoldipine, 45
  vs. calcium antagonists, 23
  with diuretic as hypertension treatment for elderly, 559–562
Beta-VLDL, 26
Bile-acid binding resins, 638
Bile acid synthesis, 105, 106, 108
Bimakalim (EMD 52 692)
  vs. elgodipine, 414
  vs. nicorandil cardiovascular effects in pigs, 409–417
  vs. nisoldipine, 414
  vs. nitroglycerine, 416
  vs. pimobendan, 416
Bioavailability, nitroglycerin (transdermal) effect on exercise tolerance, 641–648
Bipyridine, for chronic heart failure, 16
Bisoprolol, vs. diazepam for cardiac neurosis, 249–253
BK channels, 315
Blacks, antihypertensive therapy showing regression of LVH with alpha- and beta-adrenergic blockade and thiazide therapy, 147–150
Bleifeld, Walter, obituary, 94
Blood pressure
  enalapril vs. captopril effect on serum potassium concentration, 495–498
  enalapril vs. enalapril with nadolol therapy, 261–264
  nicorandil and diltiazem effects, 472
Borg score for perceived exertion, flosequinan vs. captopril, 468, 469
Bradycardic agents, tedisamil antiischemic effects in conscious dogs, 337–342
Bradykinin, endothelium-dependent relaxations, 159–162, 164
Bretschneider equation, 338
Bucindolol
  chemical structure, 234
  decreasing ventricular fibrillation in pigs, 233–236
BW755C, 225

Calcium, circulating ionized, and action of calcium entry blockers, 137
Calcium antagonists
  age-related increase in responsiveness, 153
  amlodipine antianginal effects on exertional angina patients, 481–486
  amlodipine beneficial actions in the multiple-stunned canine myocardium, 67–75
  classification, 35–39
  congestive heart failure patients not benefited, 19–22
  effect on glomerular hydrostatic pressure in hypertensive rats, 91–92
  elderly and hypertension, 560, 562–563, 568, 571–572, 576
  mechanism of anti-fibrillatory effect, 20
  Ro 40–5967 to reduce exercise-induced regional contractile dysfunction in dogs, 167–171
  selectivity for the ischemic myocardium, 22
  suppressant effect on silent ischemia episodes, 379, 384
  use after myocardial infarction, 19–23
  verapamil vs. nebivolol for exercise endurance capacity, 244
  vs. beta-blockers, 23
Calcium binding, 137
Calcium channel agonist, Bay-K-8644 effect on ventricular fibrillation threshold, 597–603
Calcium channel blockers
  decrease in LV mass during therapy, 150
  nitrendipine vs. hydrochlorothiazide cardiac and renal hemodynamic effects in mild to moderate hypertensive patients, 141–145
Calcium-channel proteins, drug-receptor sites, 38–39
Calcium channels
  Bay-K-8644 effect on ventricular fibrillation threshold, 597–603
  classification, 35–39
  involved in protective effect of mioflazine, lidoflazine, and verapamil, 53, 57
  voltage-dependent types (VDCC), 35–37
Calcium concentration, fructose-1,6-bisphosphate effect, 215–216
Calcium entry blockers, action on circulating ionized calcium, 137
Calcium-ion selective channels, voltage-dependent, 36–37
Campbell subclassification, 520
Captopril
  after Q-wave myocardial infarction, 119
  beneficial effects in murine EMC viral myocarditis, 7, 10
  cardioprotective effects, 437–442
  decrease in LV mass during therapy, 150
  transdermal delivery in hypertensive rabbits, 589–594
  vs. enalapril for heart failure treatment, 173–179, 181
  vs. enalapril for reduction of post-ischemic ventricular arrhythmia, 441
  vs. flosequinan effects with severe heart failure, 465–470
  vs. nebivolol for exercise endurance capacity, 244
Cardiac Arrhythmia Suppression Trial (April, 1989), 12, 13, 14
Cardiac cells, potassium channel activation, 313–317
Cardiac function
  nitrendipine vs. hydrochlorothiazide hemodynamic effects, 141–145
  verapamil for angina pectoris in middle-aged and elderly patients, 153–158
Cardiac index (CI), 490
Cardiac neurosis
  bisoprolol vs. diazepam therapy, 249–253
  characteristics of syndrome, 249
  diagnostic criteria, 249
Cardiac performance, atenolol (IV) in elderly in early phase of acute myocardial infarction, 475–478
Cardioprotection, fructose-1,6-bisphosphate and admninistration timing, 209–217
Cardiovascular effects, digitalis beneficial effects for sinus rhythm and heart failure, 459–462
Cardiovascular medicine, textbook of (book review), 546
Cardiovascular mortality, hypertension as common denominator among elderly, 565–568
Caroverine, 38
Carteolol
  beneficial after murine viral myocarditis, 7, 8, 9
  for dilated cardiomyopathy, 8
Carvedilol
  effect on cirazoline- and isoproterenol-

mediated hemodynamic responses in rats, 499–503
vs. celiprolol, 503
CASS study, 379
CAST studies, 519–526
Catecholamines
decreased by tedisamil therapy, 353–355, 357–360
for chronic heart failure, 16
Celiprolol
effect on cardiovascular responses to smoking, 543–544
vs. carvedilol, 503
vs. ketanserin on regression of LV hypertrophy in older hypertensives, 419–423
Cellular calcium distribution, atrial muscle protection by mioflazine, lidoflazine, and verapamil, 51–57
Cerebrovascular disease, and aspirin, 116
CGP 28392, for chronic heart failure, 16
Chemiluminescence, ACE inhibitors' (captopril, zofenopril and fosinopril) response, 440, 441
Chlorthalidone, elderly and hypertension therapy, 572, 580, 581
Cholesterol
and age, 134
baseline, 102
and coronary heart disease, 131–135
cost-benefit ratio of lowering cholesterol concentrations, 135
and education of public about risk factors, 134–135
lowering and reduction of coronary heart disease, 101–102
simvastatin effect of HDL subfractions and apolipoproteins in hypercholesterolemia, 633–638
and women, 134
Cholesterol benefit ratio, 101–102
Cholesterol biosynthesis, and metabolism, 103–109
Cholesterol 7α-hydroxylase, regulation in bile acid synthesis, 103, 106, 108
Cholestyramine, for regression of atheroma, 132, 133
Chronic heart failure
and digitalis, 461–462
digitalis mechanisms of action, 462
hemodynamic benefits from phosphodiesterase inhibitors and beta-adrenergic agonists, 15
oral nonglycoside inotropic agent effects on long-term outcomes, 16–17
Chronic lung disease, and beta-blockade, 19
Chronic pulmonary heart disease, digitalis therapy doubtful or useless, 460
Chronotropic effect, OPC-8212 lacking, 18
Cibenzoline, classification, 525
Cicaprost, 118
Cicloprolol, hemodynamic effects, 513–516
Cinnarizine, 35, 38
Class II drugs, 13
Class III antiarrhythmic agent, dofetilide (UK-68,798) antiarrhythmic actions in guinea pigs, 429–435
Class III drugs, 13, 14
Clentiazem (TA-3090), 38
Clofibrate, 133
Clofilium, 317
vs. dofetilide, 434
Clonidine, recommended for malignant hypertension, 497
Clopidogrel, antithrombotic prevention, 117
Cobra venom factor, 225
Collateral blood flow, amlodipine beneficial actions in multiple-stunned canine myocardium, 67–75
Combination therapy
elderly and hypertension, 576
enalapril with nadolol, 261–264
Congestive heart failure
ACE-inhibitor therapy, 119, 176, 179
beta-adrenergic agonists and phosphodiesterase inhibitors, 15, 17
bucindolol therapy, 233, 235
calcium antagonist effect, 19–22
captopril beneficial in mice, 10
choice of ACE inhibitor, 181
digitalis beneficial effects, 459–462
dobutamine long-term effects and lack of tolerance, 391–397
and early proarrhythmia, 12
nifedipine hemodynamic effects in children with Eisenmenger's mechanism, 183–185
phosphodiesterase inhibitors as therapeutic tools, 159, 165
CONSENSUS trial, 179
Control hypotension, not changed by sodium nitroprusside and nitroglycerin, 611–621
Coope-Warrender study, elderly and hypertension, 559, 560
Coronary angioplasty
antithrombotic prevention, 117
improvement in resting systolic function, 282
Coronary artery bypass grafting (CABG)
atenolol vs. nifedipine or atenolol with nifedipine antianginal therapy, 380–381, 382
glucose uptake preservation as prediction of recovery, 276
hibernating myocardium, 282
recovery of function, 290
and silent ischemia, 126–127, 128
Coronary artery disease (CAD)
bepridil efficacy evaluation by electrophysiologic testing, 187–192
calcium channel blocker use limited, 167
glucose uptake affected in myocardium, 275
hibernating myocardium, historical perspective, 267–270
left ventricular dysfunction and hibernating myocardium, 287, 291
no antihypertensive drug for protection against, 579, 580, 581, 582
and silent ischemia, 125, 126, 127
surgery increasing survival rates, 379
tedisamil hemodynamic and antiischemic effects, 353–360
Coronary artery ligation, tedisamil vs. alinidine, verapamil, dobutamine, and propranolol therapies in rats, 329–335
Coronary blood flow
cyclosporin and cremophor EL effect on endothelial functions in rat hearts, 78, 81, 82
5-hydroxytryptamine and nitroglycerin effects in rat hearts, 78–81
Coronary Drug Project, 133
Coronary heart disease (CHD)
as cause of heart failure, 174, 175, 177
and cholesterol, 131–135
and estrogen replacement therapy, 134
high fibrinogen levels, 25
nicorandil vs. diltiazem effects on serum lipid, apolipoprotein and lipoprotein levels, 471–473
recovery of systolic function, 282, 283–284
reduction and lowering of cholesterol, 101–102
Coronary occlusions
atenolol vs. nifedipine intracoronary antiischemic effects, 255–259
and hibernating myocardium, 283
Coronary patency, rt-PA dose and duration (IV) effect, 373–377
Coronary revascularization
and hibernating myocardium, 267–268, 270, 273–274, 276
necessary for recovery of hibernating myocardium, 281, 282
reversal of chronic myocardial asynergy, 287, 289, 290, 291
Coronary "steal" phenomenon, 236
Coronary stenosis, Ro 40–5967 effect on systemic hemodynamics and regional contractile function in dogs, 167–171
Cox-sackie B3 virus, lobenzarit effect on survival rate in mice, 406
Cremophor EL
effects on endothelial function and vascular smooth muscle in rats, 77–82
effects on renal hemodynamics and tubular function, 79
Critical depression, 522
Cromakalim, 315
hypertension and ATP-sensitive potassium channels, 205

Cyclic adenosine monophosphate
cellular content increased by phosphodiesterase inhibitors, 159, 163, 164, 165
increased by phosphodiesterase inhibitors and beta-adrenergic agonists, 15, 17
lessened ischemia decreasing extent of arrhythmogenic rise, 20
Cyclic GMP, 231
phosphodiesterase inhibitor relaxations and EDRF, 162, 163, 164–165
Cyclosporin, no effect on human ability of endothelium to release EDRF, 82
Cyclosporin A, effects on endothelial function and vascular smooth muscle in rats, 77–82
Cyclosporine, effect on murine viral myocarditis, 9

D600, vasorelaxant activity, 605–609
Da Costa syndrome, 249–253
Darodipine, 38
Databases Unit, Glasgow University, 383
DAVIT-I Danish Verapamil trial, calcium antagonists, postinfarct, 19
DAVIT-II Danish Verapamil trial, calcium antagonists, postinfarct, 19, 20, 21
Delayed afterdepolarizations
and ATP-sensitive potassium channel openers, 205
and inotropic agents, 17
Delayed afterpotentials, 600, 601, 602
Delayed rectifier, potassium channels, 313
Delay time, prehospital thrombolysis in a rural community, 369–372
Dementia, hypertension and elderly, 572
Dendrotoxin I, 317
Denopamine
for chronic heart failure, 16
for dilated cardiomyopathy, 8
Devapamil, 38
Diabetes mellitus, non-insulin dependent, and ATP-sensitive potassium channels, 205
Diastolic function, recovery of, 281, 283
Diastolic perfusion time, UL-FS 49 cardiovascular effects affected by chronic left ventricular dysfunction, 60
Diazepam, vs. bisoprolol for cardiac neurosis, 249–253
Diazoxide, 315
hypertension and ATP-sensitive potassium channels, 205
Diclofurime, 38
Diets, and hypercholesterolemia, 135
Digitalis
absolute and relative contraindications, 460
beneficial effects for sinus rhythm and heart failure, 459–462
and chronic heart failure, 15, 16, 461–462
diseases in which therapy appears doubtful or useless, 460
effective indications for therapy, 462
historical review of its main effects on the cardiovascular system. 460
mechanisms of action in chronic heart failure, 462
proarrhythmic effect, 11
Digoxin therapy, for chronic heart failure, 15
Dilated cardiomyopathy
as cause of heart failure, 174, 175, 177
pharmacotherapy current status and future directions, 7–10
treatment used, 8
Diltiazem
adverse effect with congestive heart failure, 19
calcium-antagonistic action, 35, 38
effect on circulating ionized calcium, 137
Multicenter Diltiazem Post-Infarct trial, 19–20
negative inotropic effect, 167, 170
no adverse effect on serum lipoprotein metabolism, 473
non-potassium-dependent depolarization reduced by, 20
reducing glomerular pressure in spontaneously hypertensive rats, 91–92
suppression of ventricular premature contractions, 539
vs. disopyramide effect on LV diastolic function with hypertrophic cardiomyopathy, 425–427
vs. nicorandil effect in ischemic heart disease patients, 471–473
vs. nisoldipine, 45
Dimethyl-thiourea, 629
Diphenylhydantoin, classification, 519–520, 525
Disintegrins, 111, 117–118
Disopyramide
anticholinergic effect in healthy humans, 529–537
classification, 520, 522, 523, 525, 526
suppression of ventricular premature contractions, 539
vs. bepridil, 192
vs. diltiazem effect on LV diastolic function with hypertrophic cardiomyopathy, 425–427
Diuretics
administered in enalapril vs. captopril study in malignant hypertension, 496
amiloride effect on metabolic response to adrenaline infusions, 219–223
conflicts with Dr. Opie's editorial and treatment recommendations for elderly hypertensives, 563–564
elderly and hypertension, 571, 572, 575–576, 580–581, 585
hydrochlorothiazine with labetalol for antihypertensive therapy, 147–150
with beta blocker as hypertension treatment for elderly, 559–563
Dobutamine
acute hemodynamic effects, 391–396
age-related decrease in response, 478
congestive heart failure long-term effects and lack of tolerance, 391–397
for chronic heart failure, trial not continued, 16
for dilated cardiomyopathy, 8
proarrhythmic effect, 397
tolerance development, 397
to stimulate myocytes to identify hibernating myocardium, 287, 289, 290–291
vs. tedisamil in rat hearts with coronary ligation, 329, 330, 333–335
Docosahexaenoic acid (DHA), vasorelaxant activity, 605–609
Dofetilide (UK-68,798)
antiarrhythmic actions in guinea pigs affected by altered extracellular potassium and pacing cycle length, 429–435
vs. clofilium, 434
vs. E-4031, 433, 434
vs. sotalol, 434
Dogs
amlodipine beneficial actions in the multiple-stunned myocardium, 67–75
nicorandil's anti-free-radical and neutrophil-modulating properties, 225–231
tedisamil antiischemic effects, 337–342
Dolichols, 105
Dopamine
for dilated cardiomyopathy, 8
to aid identification of hibernating myocardium, 289
Doppler echocardiography, assessment of LV diastolic function effect of disopyramide vs. diltiazem on transmitral flow velocities, 425–427
Down's syndrome, nifedipine hemodynamic effects in children with congenital heart disease and Eisenmenger's mechanism, 183–185
D-phenylalanyl-L-prolyl-L-arginyl chloromethylketone (P-PACK), 116
DPI 201-106, for chronic heart failure, 16
Drug administration routes, transdermal captopril in hypertensive rabbits, 589–594
Drug therapy
affecting plasma fibrinogen levels, 25–26
elderly and hypertension, 579–582

D-sotalol, with ACE-inhibitor therapy, 174
Duplocillin, 60

E-4031, vs. dofetilide, 433, 434
Early afterdepolarizations, and ATP-sensitive potassium channel openers, 205
Echocardiography
  to identify hibernating myocardium, 287, 289–291
  transesophageal principles, book review, 452
Effort syndrome, 249–253
Eicosapentaenoic acid (EPA), vasorelaxant activity, 605–609
Eisenmenger's mechanism
  defined, 183
  nifedipine hemodynamic effects in children with congenital heart disease, 183–185
Elderly
  antihypertensive therapy, 559–562, 565–568, 571–573, 575–576, 579–582, 585–587
  hypertension treatment paradigms, practices, and proofs, 565–568
  ketanserin vs. celiprolol effect on LV hypertrophy in hypertensives, 419–423
  verapamil therapy for angina pectoris, 153–158
Elderly hypertensives, conflicts with Dr. Opie's editorial and treatment recommendations, 563–564
Elderly patients, atenolol (IV) in early phase of acute myocardial infarction, 475–478
Electrocardiogram, to record metabolic response effects of hydrochlorothiazide, amiloride, and lisinopril on adrenaline infusions, 219–223
Electropharmacology, disopyramide and mono-N-dealkylated disopyramide electrophysiologic effects, 529–537
Electrophysiological actions, tedisamil's antiarrhythmic actions in rats and primates, 345–351
Electrophysiological characteristics, dofetilide effect on guinea pig papillary muscles, 432
Elgodipine, 38
  and left ventricular function, 63
  vs. bimakalim, 414, 416
ELISA method, 634
Embalment of the myocardium, 291
EMD 52692, 226, 230, 231
Enalapril
  decrease in LV mass during therapy, 150
  elderly and hypertension, 568
  reducing mortality in heart failure patients, 223
  vs. captopril for heart failure treatment, 173–179, 181
  vs. captopril for reduction of post-ischemic ventricular arrhythmia, 441
  vs. enalapril with nadolol, 261–264
  vs. nebivolol for exercise endurance capacity, 244
Encainide
  classification, 520–522, 525, 526
  and late proarrhythmia, 11, 12, 13, 14
Encephalomyocarditis (EMC) virus, lobenzarit (CCA) effect on murine myocarditis, 403–407
Endothelial function
  cremophor EL effect in isolated rat heart, 77–82
  cyclosporin effect in isolated rat heart, 77–82
Endothelium-derived relaxing factor (EDRF)
  and nitric oxide, 119
  phosphodiesterase inhibitors not affecting, 159–165
  release in humans not affected by cyclosporin as in rat heart cases, 82
  release of EDRF/nitric oxide as function of endothelium, 79, 82
End-stage renal disease, nitrendipine vs. hydrochlorothiazide hemodynamic effects, 145
Endurance performance, nebivolol vs. atenolol effects, 239–246
Enoximone, for chronic heart failure, 16
Epinephrine, to aid identification of hibernating myocardium, 289
Equilibrium radionuclide angiocardiography (ERNA), 42
Essential arterial hypertension, nitrendipine vs. hydrochlorothiazide cardiac and renal hemodynamic effects, 141–145
Essential circulatory hyperkinesis, 249–253
Essential hypertension, ketanserin vs. celiprolol effect on LV hypertrophy and survival in elderly, 419–423
Estrogen replacement therapy, and coronary heart disease incidence, 134
European Cooperative Study Group 5, 376
European Cooperative Trial, 379
European Working Party on Hypertension in the Elderly (EWPHE), elderly and hypertension treatment, 560–561, 565–568, 571, 572, 575–576
Evans Country Study, 147
Exercise
  corridor walk test results for flosequinan vs. captopril, 468–469
  dobutamine intermittent therapy effect on congestive heart failure, 393, 395
  effect on ANP after arotinolol treatment, 387–390
  enalapril vs. enalapril with nadolol therapy hemodynamic effects, 261–264
  maximal, nebivolol vs. atenolol influence, 239–246
  mean (SEM) symptom-limited treadmill tolerance in study while patients taking flosequinan and captopril, 467–468, 469
  nifedipine effect on lactate threshold and hormone release in normal subjects, 85–89
  tedisamil's antiischemic effects in conscious dogs, 337–340
Exercise test
  amlodipine antianginal effects and treadmill exercise testing, 481–486
  nitroglycerin (transdermal) effect on tolerance, 641–648
Exercise tolerance
  with atenolol, 239–246
  with nebivolol, 239–246

Falipamil, vs. UL-FS 49, 63, 64
Farnesyl pyrophosphate (FPP), 105
Felodipine, 38
  vascular selectivity to avoid LV failure from calcium antagonist therapy, 22
Fendiline, 38
Fenton reaction, 623, 630
Ferrets, contractile dysfunction and ATP depletion in stunned myocardium from calcium overload, 74
^{18}F-Fluorodeoxyglucose (FDG)
  to detect cardiac viability, 289
  to measure myocardial glucose utilization in hibernating myocardium, 273, 275–276
Fibrates, affecting plasma fibrinogen levels, 25, 26
Fibrillo-flutter, and tedisamil therapy, 349, 350, 351
Fibrinogen, 115, 117, 118
  factors affecting plasma levels, 25–26
  high plasma levels and drug effects, 25–26
Fibrinogen levels, rt-PA dose and duration effect, 376
Fibronectin, 117
Fish oil, omega-3 fatty acid vasorelaxant activity, 605–609
FK 565, inhibiting myocardial virus replication and damage in murine EMC viral myocarditis, 7, 9–10
Flecainide
  classification, 520–523, 525, 526
  and early proarrhythmia, 12
  and late proarrhythmia, 11–14
Flordipine, 38
Flosequinan, vs. captopril effects with severe heart failure, 465–470
Flunarizine, 38
  vs. verapamil, 53–57
F-met-leu-phe (FMLP), chemotactic peptide, 230, 231
Force of contraction, atrial muscle protection by mioflazine, lidoflazine and verapamil against Ca^{2+}, 48–51

Forskolin, for chronic heart failure, 16
Fosinopril, cardioprotective effects, 437–442
Framingham Heart Study, hypertension amplifying cardiovascular risk of aging, 565
Frequency
  pacemaker, mechanisms for modulation, 307, 310
  sinoatrial node, 305, 307, 310
Fructose-1,6-bisphosphate (FDP)
  cardioprotective effect and administration timing, 209–217
  effect on mitochondrial function, 212–213
  effect on tissue content of ATP and CP, and reduced and oxidized, 215–216
Funnel-web spider toxin, 38

G.A.B.I. Study, 94
Galanin, to open potassium ATP channels, 315
Gallopamil (D-600), calcium-antagonistic action, 35, 38
Gemfibrozil, 133, 633
Genetic inheritance, plasma fibrinogen levels, 25–26
Geranyl pyrophosphate (GPP), 105
German Activator Urokinase Study, 373, 376
GISSI study, prehospital thrombolysis, 371
Glibenclamide
  abolishes shortening of action potentials, 314
  increasing incidence of arrhythmias, 206
  pretreatment before bimakalim in pigs, 414
  restoring action-potential duration, 201–203, 205, 206
Glomerular filtration rate, diltiazem affecting hypertensive rats, 91–92
Glucose uptake, hibernating myocardium, 275, 276
Glyburide, as antagonist, 226, 229–231
Glyceryltrinitrate (GTN), effect on exercise tolerance in relation to patch application time, 641–648
Glycolysis, and metabolism of myocardial hibernation, 274
Glycosaminoglycan, 118
Guinea pigs
  atrial muscle protection by mioflazine, lidoflazine and verapamil against Ca^{2+}, 47–57
  dofetilide antiarrhythmic actions in papillary muscles, 429–435
  tedisamil effect on potassium channels, 321, 322, 325

Hamilton rating scale, psychic somatic subscales evaluated for bisoprolol vs. diazepam, 249, 250–251
Harrison's subclassification, 520
Heart disease with fixed mechanical obstacle, digitalis therapy doubtful or useless, 460
Heart failure
  captopril vs. enalapril therapy, 173–179
  digitalis beneficial effects, 459–462
Heart rate
  carvedilol effect on hemodynamic responses in rats, 499–503
  dependency, antiarrhythmic drugs analyzed, 539
  effect on ventricular contractile states in a conscious dog, 18
  OPC-8212 lack of increase seen as salutary effect, 18
Helsinki Heart Study, 633, 635
Hemodynamics
  alinidine effect on rat hearts with coronary ligation, 332
  atenolol (IV) in elderly in early phase of acute myocardial infarction, 476–477, 478
  beta blockers and maximal exercise capacity, 245
  captopril vs. enalapril for heart failure, 173–179
  celiprolol effects on responses to smoking, 543–544
  cicloprolol in subjects with normal cardiac function, 513–516
  dobutamine effects on rat hearts with coronary ligation, 333
  dobutamine intermittent therapy for congestive heart failure, 391–396
  exercise, nebivolol vs. atenolol influence, 239–246
  hydrochlorothiazide, amiloride, and lisinopril effects on metabolic response to adrenaline infusions, 221
  mannitol effects on rabbit hearts, 628
  nifedipine in children with congenital heart disease and Eisenmenger's mechanism, 183–185
  nisoldipine effect on patients with acute myocardial infarction, 41–45
  nitrendipine vs. hydrochlorothiazide antihypertensive efficacy and effects, 141–145
  platelet accumulation inhibited by beta blockade in rabbit aorta, 505–510
  propranolol effects on rat hearts with coronary ligation, 333
  sodium nitroprusside and nitroglycerin effects on dogs anesthetized with enflurane, 611–621
  tedisamil effect as shown during exercise cycles in dogs, 339
  tedisamil effect on rat hearts with coronary ligation, 330–331, 332
  tedisamil effects in humans, 353–360
  verapamil effects on rat hearts with coronary ligation, 332
  zatebradine (UL-FS 49) effects on left ventricular function in pigs with chronic coronary artery occlusion, 59–64
Heparin, 117
  after rt-PA thrombolytic therapy, 374, 376
  concomitant treatment with alteplase and high-dose IV heparin, 115
  and platelet inhibition with thrombolytic drugs, 116
  prehospital thrombolysis and survival rates, 370
Hepatectomy, partial, cholesterol biosynthesis and metabolism, 103
Hepatocyte stimulating factor (HSF), 25–26
Herpes simplex virus, lobenzarit prolonging survival rate in mice, 403, 406
Hibernating myocardium
  characteristics, 267
  clinical detection, 274
  clinical evidence, 273
  clinical importance, 287–291
  determinants of, 288–289
  historical perspective, 267–270
  identification, 287–291
  metabolism, 274–275
  and myocardial ischemia, positron emission tomography detection, 273–277
  recovery of myocardial function, 281–284
  requirements for, 269–270
High-density lipoproteins (HDL)
  and coronary heart disease, 131, 132, 134
  simvastatin effect in type IIa hypercholesterolemia, 633–638
High-energy phosphates, decreased in myocardial stunning but helped by amlodipine, 67, 74
Hirudin, recombinant, and synthetic hirudin analogues, 115–116
HMG-CoA (3-hydroxy-3-methylglutaryl coenzyme A), cholesterol biosynthesis and metabolism, 103–109
HN-10200
  chemical structure, 160
  as phosphodiesterase inhibitor affecting endothelium, 159–165
HOE 166, 38
Homeostasis, cholesterol, regulation of, 106–109
Hormone replacement therapy, and coronary heart disease, 134
Hydralazine
  chemical structure, 234
  no effect on LV mass, 150
Hydrochlorothiazide
  effect on metabolic response to adrenaline infusions, 219–223
  elderly and hypertension, 559, 560, 563, 580, 581
  EWPHE trial, 571
  vs. nitrendipine, cardiac and renal hemodynamic effects, 141–145

with labetalol, for antihypertensive therapy in blacks, 147–150
Hydroxybepridil, 192
Hydroxyl radicals
EPR-visible, 630
nicorandil scavenging effect, 225–226, 230
Hydroxymethylglutaryl coenzyme A reductase inhibitors, 133
3-Hydroxy-3-methyl-glutaryl coenzyme A, cholesterol biosynthesis and metabolism, 103–109
5-Hydroxytryptamine (5-HT), perfusion technique (control) for effect of cremophor EL and cyclosporin A in rat heart endothelial function, 78, 80, 81, 82
Hypercalcemia, efficacy of calcium entry blockers, 137
Hypercholesterolemia, 108
and omega-3 fatty acids, 609
reduction of, and coronary heart disease incidence, 131–135
simvastatin effect on high density lipoprotein subfractions and apolipoproteins, 633–638
Hyperinsulinemic-euglycemic clamp technique, 276
Hyperkalemia, associated with ACE-inhibitor therapy for hypertension, 261, 262, 263, 264
Hyperkinetic heart syndrome, 249–253
Hyperlipidaemia, in practice (book review), 451
Hyperparathyroidism, nifedipine effect on serum level of Ca^{2+}, 137
Hypertension
adrenaline-induced electrolyte changes after antihypertensive drugs, 219–223
arotinolol effect on normal subjects, 387–390
atenolol and exercise tolerance, 239–246
ATP-sensitive potassium channels, 205
bucindolol therapy, 233
elderly and treatment for, 565–568, 571–573, 575–576, 579–582, 585–587
elderly and treatment paradigms, practices, and proofs, 565–568
elderly patients and treatment recommendations, 559–562
enalapril vs. enalapril with nadolol therapy, 261–264
fenoldopam (SK&F 82526-J) intravenous effects on blood pressure in severe cases, 445–446
ketanserin vs. celiprolol effect on LV hypertrophy in elderly, 419–423
lisinopril effects on renal systemic hemodynamics, 489–494
malignant, enalapril vs. captopril effect on serum potassium concentration, 495–498
nebivolol and exercise tolerance, 239–246
nitrendipine vs. hydrochlorothiazide cardiac and renal hemodynamic effects (mild to moderate hypertension), 141–145
pathophysiology, diagnosis, and management (book review), 93
Hypertension Detection and Follow-up Program (HDFP) in United States, 147, 579, 582
elderly and hypertension, 575
Hypertensive blacks, regression of LVH with alpha- and beta-adrenergic blockade and thiazide therapy, 147–150
Hyperthyroidism, digitalis therapy doubtful or useless, 460
Hypertrophic cardiomyopathy (HCM), disopyramide vs. diltiazem effect on LV diastolic function, 425–427
Hypertrophy, and ATP-sensitive potassium channels, 205
Hypokalemia, 11
avoided for patients at risk of acute myocardial infarction, 222
Hypomagnesemia, 11
related to ischemic heart disease, 222
Hyponatremia
and ACE-inhibitor therapy, 173
captopril vs. enalapril for congestive heart failure, 181
Hypoxia, 11

Ibuprofen, 225
Idiopathic high cardiac output state, 249–253
I_K, tedisamil effect on kinetics of inactivation, 321
Iloprost, 118, 231
Imazodan, for chronic heart failure, 16
Imidazolone, for chronic heart failure, 16
Imidozopyridine, for chronic heart failure, 16
Immunoactive peptide, murine viral myocarditis treatment, 9–10
Immunosuppressive drugs, for murine viral myocarditis, 8–9
IMPACT study, 526
Index of contractility (Ees), 18
Indomethacin, with thromboxane synthase inhibitor and receptor antagonist, 31
Inheritance, determinant of blood cholesterol/lipoprotein concentration and lipoprotein receptor activity, 131
In Memoriam, Walter Bleifeld, 94
Inorganic phosphate, effect on ATP-sensitive potassium channels, 202
Inotropic agents
potential deleterious effects, 17
to replace or supplement digitalis for chronic heart failure, 15–16
Integrins, 117–118
"Intention to treat" principle, 581
Interleukin-1 (IL-1), 25, 26
produced by FK 565, 9
Interleukin-6 (IL-6), effect on acute-phase plasma proteins in humans, 25, 26
Intermittent therapy, dobutamine for congestive heart failure, 391–397
Internal medicine, textbook of (book review), 545
International Society of Hypertension, 572
Intravenous fenoldopam, effects on blood pressure in severe hypertension, 445–446
Intrinsic sympathomimetic activity (ISA)
beta blockers, 387
with beta-adrenergic blockers, 8
Inward rectification, 305, 307, 309
Iontophoresis, enhanced transdermal delivery of captopril in hypertensive rabbits, 589–594
Ischemia. *See* Myocardial ischemia
Ischemic heart disease without left ventricular enlargement, digitalis therapy doubtful or useless, 460
ISIS-1 study, 478
ISIS-4 pilot study, 119
ISIS-4 study, 222
3-Isobutyl-1-methyl-xanthine (IBMX), relaxations affected by phosphodiesterase inhibitors, 159–164
Isolated systolic hypertension
elderly and drug therapy, 585–587
no benefit to drug therapy for elderly over 80, 579–580, 581
no treatment for elderly questioned, 565–566, 567
Isopentenyl pyrophosphate (IPP), 105
Isoprenoid (C_5H_8) synthesis, 105, 106
Isosorbide dinitrate, to aid identification of hibernating myocardium, 289
Isosorbide mononitrate, 119
Isradipine, 22, 38
effect on circulating ionized calcium, 137
Israeli Sprint Study Group trial, calcium antagonists, postinfarct, 19, 20
I_{to}, tedisamil effect on rapid activation kinetics in rats, 321, 322, 323
IUPHAR (International Union of Pharmacologists), nomenclature of calcium channels and calcium antagonists report, 35–39

Japan, dilated cardiomyopathy cumulative survival rates calculated, 7, 8

Ketanserin, vs. celiprolol on regression of LV hypertrophy in older hypertensives, 419–423
Kidneys
cyclosporin effect in rats, 82
diltiazem effect on hypertensive rats, 91–92

function measured for captopril vs. enalapril, 173–179
nitrendipine vs. hydrochlorothiazide hemodynamic effects in mild to moderate hypertensive patients, 141–145
KT-362, 22

Labetalol
antihypertensive therapy for blacks, 147–150
decrease in LV mass after therapy, 150
no effect on patients with mild to moderate hypertension, 387
Lacidipine, 38
Lactate
arotinolol effect during exercise in normal subjects, 387, 388
effect on ATP-sensitive potassium channels, 202
nifedipine effect on threshold, 85–89
Lecithin: cholesterol acyltransferase (LCAT), 104
Leeches, for activated coagulation factor X, 118
Left ventricular dysfunction
during calcium antagonist therapy, 22
during hibernating myocardium, 267–270
zatebradine bradycardic effects in pigs with chronic coronary artery occlusion, 59–64
Left ventricular function
bimakalim vs. nicorandil cardiovascular effects in pigs, 410, 412–413, 415, 416
bucindolol and ventricular arrhythmias, 235
cicloprolol hemodynamic effects, 513–516
depression and ACE-inhibitor therapy, 173
ketanserin vs. celiprolol in older hypertensives, 419–423
rt-PA dose and duration effect, 373
verapamil therapy in middle-aged and elderly patients with angina pectoris, 154–155
Left ventricular hypertrophy
ketanserin vs. celiprolol regression in older hypertensives, 419–423
regression after alpha- and beta-adrenergic blockade and thiazide therapy in hypertensive blacks, 147–150
regression with alpha- and beta-adrenergic blockade and thiazide therapy in blacks, 147–150
Leukotrienes, 26
Levemopamil, 38
Lidocaine
classification, 519–525
vs. mono-N-dealkylated disopyramide, 536
Lidoflazine, protective effects against accumulation of cellular calcium in humans, rats, and guinea pigs, 47–57
Ligand-operated channels, activation and receptor or condition, 305, 306, 309–310
Lipids, nicorandil and diltiazem effect in ischemic heart disease patients, 471–473
Lipids Research Clinics Program Coronary Primary Preventive Trial (LRC-CPPT), 101
Lipolysis, serum NEFA concentration significant, 246
Lipoproteins, nicorandil vs. diltiazem effects in ischemic heart disease patients, 471–473
Lisinopril
effect on metabolic response to adrenaline infusions, 219–223
effects on renal and systemic hemodynamics in hypertension, 489–494
exercise tolerance and functional capacity in heart failure patients, 177, 178–179
vs. nitrendipine on pulsatility index in mild essential arterial hypertension, 399–402
Lobenzarit, effect on murine myocarditis induced by encephalomyocarditis virus, 403–407
Lovastatin, 633, 637
Low-density lipoproteins (LDL)
cholesterol biosynthesis and metabolism role, 103–109
and coronary heart disease, 131, 132, 134
Lower limb arteries, lisinopril vs. nitrendipine antihypertensive effects on pulsatility index, 399–402
Lysophosphatidylcholine, effect on ATP-sensitive potassium channels, 202

Main organ circulation, sodium nitroprusside and nitroglycerin effects on dogs anesthetized with enflurane, 611–621
Malignant hypertension, enalapril vs. captopril effect on serum potassium concentration, 495–498
Mannitol
effect on reperfusion injury in rabbit hearts, 623–631
hemodynamic effects, 628
MCD peptide, 317
MCI176, 38
McN6186, 38
MD-805, as synthetic selective thrombin inhibitor, 116
MDL12330A, 38
Medical Research Council trial, elderly and hypertension, 560–563, 566–567, 571–572, 575–576, 579–582
Membrane phospholipids, ACE inhibitors' (captopril, zofenopril and fosinopril) effects on degradation, 437, 439–442
Mercaptopropionyl-glycine, 629
Meridional wall stress (MWS), 514
Meta-analysis
cholesterol lowering and coronary heart disease reduction, randomized trials, 101–102
elderly and hypertension drug therapy, 579–582
to detect late proarrhythmia, 13
Metabolism, effects of hydrochlorothiazide, amiloride, and lisinopril on metabolic response to adrenaline infusions, 219–223
Met-enkephalin release, nifedipine and responses to exercise, 88–89
Metoprolol
analgesic properties in acute myocardial infarction, 258
augmenting adenylate cyclase activity in normal rabbits, 7
effect not seen after murine EMC viral myocarditis, 7, 9
effect on platelet accumulation in rabbit aorta, 505–510
elderly and hypertension, 559–560
with beta-blockers, 8
Mevalonate, cholesterol biosynthesis, 104–108
Mexiletine
classification, 520–521, 523, 525, 526
and late proarrhythmia, 11, 13
suppression of ventricular premature contractions, 539
MIAMI trial, 478
Mice, lobenzarit effects on acute viral myocarditis, 403–407
Micropuncture, direct pressure measurements taken of diltiazem intrarenal hemodynamic effects in hypertensive rats, 91–92
Milrinone, for chronic heart failure, 16
Minoxidil, hypertension and ATP-sensitive potassium channels, 205
Minoxidil sulfate, 315
Mioflazine
protective effects against accumulation of cellular calcium in human, rats, and guinea pigs, 47–57
vs. verapamil, 53–57
MK-733. *See* Simvastatin
Mobile coronary care unit (MCCU), streptokinase (IV) prehospital thrombolysis and survival rates, 369–372
Modulated Receptor Theory (Hondeghem and Katzung), 522
Molsidomine, 119, 231
Monkeys, tedisamil's antiarrhythmic actions, 345–351
Monoclonal antibodies, 111
and thrombus-targeted thrombolytic drugs, 111, 114
to platelet receptors, 117

Mono-N-dealkylated disopyramide
anticholinergic effect in healthy humans, 529–537
vs. lidocaine, 536
Moricizine
classification, 521, 525, 526
and early proarrhythmic response, 12, 13
no late proarrhythmic response, 11, 13
Mortality
cholesterol lowering and reduction of coronary heart disease, 101–102
noncardiac, and reduction of hypercholesterolemia, 133
prehospital thrombolysis effect, 369–372
Multicenter Diltiazem Post-Infarct trial, calcium antagonists, postinfarct, 19–20
Multiple Risk Factor Intervention Trial (MRFIT), 575
serum cholesterol levels, 134, 135
Multiple-stunned myocardium, amlodipine beneficial actions in dogs, 67–75
Multivessel disease, and silent ischemia, 127
Murine anti-murine antibodies, 117
Murine encephalomyocarditis (EMC) viral myocarditis, 7, 8
Murine viral myocarditis, treatment regimens and pharmacotherapy, 8–10
Myocardial blood flow
amlodipine and multiple stunned myocardium, 68–71
chronically reduced in hibernating myocardium, 273–277
increased by bucindolol, 233, 234–236
Myocardial dysfunction
abolished by propranolol, 341
alinidine effect, 337
diminished by tedisamil in conscious dogs, 337, 341–342
zatebradine effect, 337, 342
Myocardial infarction
alteplase bolus administration, 111–112
alteplase with streptokinase IV administration, 112
angiotensin-converting-enzyme inhibitors used, 119
aspirin, 116
associated with elevated plasma adrenaline levels, 219, 222, 223
bimakalim vs. nicorandil cardiovascular effects in pigs, 409–417
bucindolol effect, 235
and cholesterol levels, 133, 134
combined IV administration of saruplase and urokinase, 112–113
coronary flow reserve impairment later affected by tachycardia-induced reduction, 60, 61, 62, 64
metoprolol therapy, 510
myocardial blood flow and perfusable tissue index, 277
nicorandil as modulator of free-radical-induced injury, 225
prehospital thrombolysis and survival rates, 369–372
propranolol IV effect on ST segment elevation, 258
ridogrel enhancing alteplase-induced reperfusion, 117
and silent ischemia, 126, 127
taprostene therapy, 118
Myocardial ischemia
action potential shortening in epicardial fibers, 309
and amrinone therapy, 16
antiplatelet therapy, 29
associated with an increase in tissue edema, 627
and ATP-sensitive potassium channels, 201–206
atrial natriuretic peptide massive release in ischemia reperfusion, 447
bucindolol effect on mechanical function of pig hearts, 233–236
captopril cardioprotective effects, 437–442
coronary flow reserve impairment later affected by tachycardia-induced reduction, 59–60, 64
exercise-induced, 167–171
fosinopril cardioprotective effects, 437–442
fructose-1,6-biphosphate (FDP) not exerting cardioprotection at time of, 209, 212, 213–216
and hibernating myocardium positron emission tomography detection, 273–277
inducing shortening of action potentials, 314–315
mannitol and superoxide dismutase efeffect on reperfusion injury in rabbits, 623–631
outcomes, 287–288
and potassium channels, 4th International Symposium of Cardiovascular Pharmacotherapy, 361–362
promoted by acute fall of diastolic blood pressure with nifedipine, 20
and silent ischemia, 127
tedisamil antiarrhythmic actions in rats and primates, 345–351
tedisamil antiischemic effects in conscious dogs, 337–342
tedisamil antiischemic properties assessed in rat hearts with coronary ligation, 329
zofenopril cardioprotective effects, 437–442; *see also* Silent ischemia
Myocardial metabolism, persistent impairment of contractile function vs. endocardial blood flow, 267, 268–270
Myocardial segment shortening, amlodipine and multiple stunned myocardium, 68, 71, 72, 74
Myocardial stunning
development of reproducible experimental models, and hibernating myocardium, 267, 270
as outcome of myocardial ischemia, 288, 289, 291
potentially reversible, 281, 282, 283
Myocardial ultrastructure, atrial muscle protection by mioflazine, lidoflazine and verapamil against Ca^{2+}, 51–57
Myocardial viability
detection of, 289–290
and hibernating myocardium, 274–276
identification by echocardiography during dobutamine infusion, 290–291
Myocarditis, lobenzarit effect in mice, 403–407
Myocytes, stimulated to aid identification of hibernating myocardium, 287–289

N-3 fatty acids, affecting plasma fibrinogen levels, 25, 26
Nadolol, with enalapril vs. enalapril alone, 261–264
National Heart Foundation of Australia, elderly and hypertension treatment study, 560
Nebivolol, exercise tolerance effect vs. that of atenolol, 239–246
Negative inotropic effect, mediating myocardial protection during PTCA, 258
Nephrosclerosis, increased glomerular hydrostatic pressure as factor, 91
N-ethylmaleimide, 202
Neurocirculatory asthenia, 249–253
Neutrophil-modulating properties of nicorandil, 225–231
Nicardipine, 38
effect on circulating ionized calcium, 137
no adverse effect on serum lipoprotein metabolism, 473
Nichols and Lederer study (1990), 203
Nicorandil, 315
anti-free-radical and neutrophil-modulating properties, 225–231
hypertension and ATP-sensitive potassium channels, 205
vs. bimakalim cardiovascular effects in pigs, 409–417
vs. diltiazem effect in ischemic heart disease patients, 471–473
Nicotinamide, 225–227, 229, 230
Nicotinic acid
and reduction of hypercholesterolemia, 133
scavenging of hydroxyl radicals, 225, 226, 227, 230
Nifedipine
age-related responsiveness, 153
antianginal and antiischemic effects, 379
calcium-antagonistic action, 35, 38

effect on circulating ionized calcium, 137
effect on lactate threshold, hormone release during exercise and quality of life, 85–89
effects similar to those of nitrendipine, 145
elderly and hypertension, 560, 581
intracoronary antiischemic effects vs. those of atenolol during coronary occlusions, 255–259
intracoronary vs. sublingual administration for myocardial ischemia, 258
long-term treatment, congenital heart disease in children with Eisenmenger's mechanism, 183–185
negative inotropic and/or chronotropic effects, 170
no adverse effect on serum lipoprotein metabolism, 473
no cardioprotective effect, 225
no decreased platelet deposition, 116
recommended for malignant hypertension, 497
reducing incidence of myocardial ischemia and myocardial infarction, 75
SPRINT trial administration, 20
transient repolarization changes during IC administration, 259
vs. nisoldipine, 45
with nisoldipine, 44
Niguldipine, 38
Niludipine, 38
Nimodipine, 38
Nisoldipine, 38
effect on circulating ionized calcium, 137
hemodynamic effects in patients with acute myocardial infarction, 41–45
high-dose effects on patients with myocardial infarction, 44
and left ventricular function, 63
low-dose effects on patients with myocardial infarction, 43
side effects, objective, 43
vs. bimakalim, 414, 416
Nitrates, nitroglycerin (transdermal) effect on exercise tolerance, 641–648
Nitrendipine, 38
age-related responsiveness, 153
elderly and hypertension, 560, 562, 568
no adverse effect on serum lipoprotein metabolism, 473
vs. hydrochlorothiazide, cardiac and renal hemodynamic effects, 141–145
vs. lisinopril on pulsatility index in mild essential arterial hypertension, 399–402
Nitric oxide (NO)
and endothelium-derived relaxing factor, 119
guarding against vasospasm and platelet aggregation, 79
release of EDRF/nitric oxide as function performed by endothelium, 79
Nitroglycerin
effect on dogs anesthetized with enflurane, 611–621
not altering free-radical production in PMA-stimulated neutrophils, 225, 226, 228, 229, 231
perfusion technique (control) for effect of cremophor EL and cyclosporin A in rat heart endothelial function, 78, 80, 81, 82
response associated with histologically intact myocardium, 282
to aid identification of hibernating myocardium, 289, 290
to reverse ventricular asynergy, 274
vasorelaxant activity, 605–609
vs. bimakalim, 416
Nitroprusside, effect on dogs anesthetized with enflurane, 611–621
Nitrovasodilator, nicorandil anti-free-radical and neutrophil-modulating properties, 225–231
Nodal cells, 306
Nomenclature, calcium antagonists and calcium channels, 35–39
Nonesterified fatty acids (NEFA), ACE inhibitor effects, 439–440, 442
No-reflow phenomenon, 629
Norepinephrine, contractions induced by, 160, 161
Norverapamil, pharmacokinetics, 155–157
Nuclear cardiology, to identify hibernating myocardium, 287, 289–290
Nuclear magnetic resonance spectroscopy (MRS), to determine ATP static concentration in area of myocardium, 268

Omega-Conotoxin, 38
Omega-3 fatty acids, vasorelaxant activity, 605–609
OPC-8212
for chronic heart failure, 16, 17–18
lack of an increase in heart rate most likely cause of salutary effect, 18
Opsonized zymosan, activating neutrophils, 225, 226, 228, 229, 230–231
Osler's maneuver, 561
Osterziel study, 181
Outward rectification, 310
Oxidative stress, fructose-1,6-biphosphate (FDP) cardioprotection, 214, 216
Oxidized glutathione (GSSG), effect of fructose-1,6-biphosphate, 211, 214, 216
Oxodipine, 38
Oxygen breathing, increase in ratio of pulmonary flow to aortic flow from nifedipine for congenital heart disease, 183–185
Oxygen demand, rate-pressure product as index of, 45
Oxygen free radicals, ACE inhibitors' (captopril, zofenopril and fosinopril) scavenging efficacy, 437–442
Oxygen radicals, mannitol and superoxide dismutase effect on reperfusion injury in rabbits, 623–631
Oxygen uptake, arotinolol effect during exercise in normal subjects, 387, 388–389

Packer study, 181
PAF, 26
Papaverine
relaxation induced vs. those of phosphodiesterase inhibitors, 161–164
vasorelaxant activity, 605–609
Paroxysmal polymorphic ventricular tachycardia, caused by quinidine, 11
P channels (Purkinje cells), 35–36, 37
Penticainide, classification, 525
Pentoxifylline, affecting plasma fibrinogen levels, 25, 26
Perceived exertion, atenolol vs. nebivolol exercise tolerance rating, 240, 242, 243, 245
Percutaneous transluminal coronary angioplasty, atenolol vs. nifedipine intracoronary antiischemic effects, 255–259
and hibernating myocardium, 270
improvements in ventricular wall motion following, 273, 274, 276
recovery of systolic function after stable angina, 282, 283, 284
and silent ischemia, 127, 128
steerable wire technique, 256
Peripheral artery balloon angioplasty, antithrombotic prevention, 117
Peripheral circulation, lisinopril vs. nitrendipine effect on pulsatility index in mild essential arterial hypertension, 399–402
Peripheral vascular disease, and beta-blockade, 19
Peritubular capillary pressure, diltiazem effect measured in hypertensive rats, 91–92
Persistent ischemic dysfunction, 267
Pharmacokinetics, tedisamil IV therapy production of increased peak plasma concentrations, 357, 359
Phorbol myristate acetate (PMA) studies, 225–228
Phosphate-pyroantimonate technique, cytosolic calcium overload demonstrated, 57
Phosphodiesterase inhibitors
developed as therapeutic tools for congestive heart failure treatment, 159–165
hemodynamic short-term benefits for advanced heart failure patients, 15, 16–17

Picornavirus, inducing myocarditis and affected by lobenzarit, 406
Picotamide, 31
Pigs
  atherosclerosis development showing platelet role, 510
  bimakalim vs. nicorandil cardiovascular effects after myocardial infarction, 409–417
  bucindolol effect on ventricular fibrillation and myocardial ischemia, 233–236
  zatebradine bradycardic effects on left ventricular function with chronic coronary artery occlusion, 59–64
Pimobendan
  for chronic heart failure, 16
  and left ventricular dysfunction, 63
  vs. bimakalim, 416
Pinacidil, 315
  hypertension and ATP-sensitive potassium channels, 205, 206
Pinaverium, 38
Pindolol, 8
  elderly and hypertension, 559–560
Pirbuterol, for chronic heart failure, 16
Piroximone, for chronic heart failure, 16
Plasma potassium
  enalapril vs. enalapril with nadolol therapy, 261–264
  nebivolol vs. atenolol during exercise, 239, 242, 245, 246
Plasminogen Activator Italian Multicenter Study, 376
Platelets, accumulation inhibited by beta-blockade in thoracic aorta of rabbits, 505–510
Pollare study, 560
Polyethylene glycol (PEG), bound covalently to recombinant hiruden, 115
Positron emission tomography (PET), detection of hibernation and myocardial ischemia, 273, 274, 275–277
  for hibernating myocardium diagnosis, 268, 270
  to evaluate coronary blood flow and hibernating myocardium, 289, 291
Postinfarct protection, calcium antagonists, 19–23
Potassium, effect on dofetilide antiarrhythmic actions in guinea pigs, 429–435
Potassium channel blockade, tedisamil vs. alinidine verapamil and propranolol therapies in rats, 329–335
Potassium channel openers, bimakalim vs. nicorandil cardiovascular effects in pigs, 409–417
Potassium channels
  acetylcholine-activated, $i_{K(ACh)}$, 309–310
  arachidonic and fatty acid-sensitive, 316, 317
  ATP-sensitive, 314–315
  ATP-sensitive, and myocardial ischemia, 201–206
  calcium ion-activated, 315
  delayed K^+ current, i_K, 305–308
  delayed rectifier, 313
  divergence of tedisamil effects in different channel types, 323–327
  Drosophila, 317
  early transient outward current, 313
  families, 314
  in ischemia, 4th International Symposium of Cardiovascular Pharmacotherapy, 361–362
  inward rectifier, 309, 313
  K^+ currents activated under pathological conditions, 310–311
  nicorandil, 230, 231
  physiological, 305–311
  response to myocardial metabolic signals, 303
  sodium ion-activated, 315–316, 317
  stochastic modeling of kinetic "variants," 323
  structure-function relationships, diversity, and pharmacology, 313–317
  tedisamil mode of action, 321–327
  transient outward current, i_{to}, 308–309
  voltage-activated, tissue and species-dependent variations in properties, 321–322
  voltage-dependent, structure of, 316–317
  voltage-dependent, tedisamil mode of action, 321–327
P-PACK, 116
Practolol, analgesic properties in acute myocardial infarction, 258
Prazosin
  decreased ANP in hypertensive patients, 389
  vs. carvedilol, 499–503
Prediction of stroke and myocardial infarction, plasma fibrinogen levels giving indication, 25–26
Prednisolone, effect on murine viral myocarditis, 9
Predrug runs, 339
Prehospital thrombolysis, survival rates, rural community, 369–372
Prenalterol, for chronic heart failure, 16
Prenylamine, 38
Pressure power calculation, 335
Pressure-rate product, exercise testing of amlodipine antianginal effects, 481, 483–484, 486
Pressure work index, 354
Primates, tedisamil's antiarrhythmic actions, 345–351
Proarrhythmia
  cellular bases and classification schemes, 521–522
  early, clinical subtypes, 12
  early, definition of, 12
  early, from antiarrhythmic therapy, 11–12
  late, from antiarrhythmic therapy, 11, 12–13, 14
  late, meta-analysis for detection of, 13
Procainamide
  classification, 519, 520, 525, 526
  vs. bepridil, 192
Prognosis
  adverse, silent ischemia treatment justification, 125–128
  atenolol or nifedipine alone or in combination, total ischemic burden, 384
Programmed stimulation
  analysis of factors predicting successful study, 191
  to evaluate bepridil efficacy for recurrent ventricular tachycardia, 187–192
Propafenone
  classification, 522, 524, 525
  mortality rate for ventricular arrhythmia, 13
Propranolol
  analgesic properties in acute myocardial infarction, 258
  and left ventricular dysfunction, vs. zatebradine, 63, 64
  myocardial protection during PTCA, 255, 256, 258
  no effect on NE and small effect on EN levels, 389
  and sick sinus syndrome, 139
  vs. bucindolol, 233, 235, 236
  vs. carvedilol, 499–503
  vs. tedisamil anti-ischemic effects in conscious dogs, 340, 341, 342
  vs. tedisamil in rats with coronary ligation, 329–331, 333–335
Prostacyclin, relaxations not affected by phosphodiesterase inhibitors, 159–165
Protein kinase C, 26
  nicorandil and neutrophil activation, 230
Proximal tubular pressure, diltiazem effect measured in hypertensive rats, 91–92
PTI. *See* Water-perfusable tissue index
Pulsatility index (PI)
  definition, 399
  lisinopril vs. nitrendipine effect in mild essential arterial hypertension, 399–402
Pyridazinone, for chronic heart failure, 16

Quality of life
  nebivolol vs. atenolol effect in physically active patients, 244–246
  nifedipine effect, 85–89
Quinidine
  classification, 519–520, 522–523, 525, 526
  and late proarrhythmia, 11, 13
  potassium channel activation, 317
Quinine, potassium channel activation, 317

Quinolinone, for chronic heart failure, 16, 17

R 56865, blocking Na^+-sensitive potassium channels, 315
Rabbits
  fructose-1,6-bisphosphate (FDP) cardioprotection during ischemia and reperfusion, 209–217
  platelet accumulation inhibited by beta blockade in thoracic aorta, 505–510
Rapid Administration of Alteplase in Myocardial Infarction (RAAMI) trial, 376
Rate pressure product, unchanged after nisoldipine in acute myocardial infarction patients, 41, 42, 45
Rat hearts
  allopurinol to stimulate peroxidative reactions in myocardium, 541–542
  atrial muscle protection by mioflazine, lidoflazine and verapamil against Ca^{2+}, 47–57
  carvedilol effect on cirazoline- and isoproterenol-mediated hemodynamic responses, 499–503
  cremophor EL effect on endothelial function and vascular smooth muscle, 77–82
  cyclosporin effect on endothelial function and vascular smooth muscle, 77–82
  diltiazem reduction of glomerular pressure when spontaneously hypertensive, 91–92
  tedisamil effect on potassium channels, 321
  tedisamil's antiarrhythmic actions, 345–351
  tedisamil vs. alinidine, dobutamine, propranolol and verapamil therapies, 329–335
Recainam, classification, 525
Recombinant-activated protein C, 118
Recombinant interferon, 9
Recovery of function
  conditions of reversible contractile dysfunction at rest, 282
  in hibernating myocardium, 281–284
Rectification, 305, 307
Recurrent long sinus arrest, in vasospastic angina, 139
Redistribution, 290
Refractoriness, ventricular, 346, 348–351
Refractory period, effect of action potential, 305, 306, 308
Regional coronary blood flow, hibernating myocardium, 289
Regional dysfunction, reduced by Ro 40-5967, 167–171
Regression, ketanserin vs. celiprolol effect on LV hypertrophy in older hypertensives, 419–423
Renal blood flow, diltiazem effect on hypertensive rats, 91–92
Renal function
  enalapril vs. captopril for treatment of malignant hypertension, 495–498
  measured for treatments with enalapril vs. captopril, 173–179
  nitrendipine vs. hydrochlorothiazide in mild to moderate hypertensive patients, 141–145
  and serum electrolytes, 175–176
Renal hemodynamics, lisinopril effects in hypertension, 489–494
Renal vascular resistance (RVRI) index, 490, 492, 493
Reperfusion
  after rt-PA thrombolytic therapy, noninvasive criteria, 375, 376
  atrial natriuretic peptide (ANP) massive release in ischemia reperfusion, 447–448
  fructose-1,6-bisphosphate (FDP) not exerting cardioprotection at time of, 209, 212, 213–216
  prehospital thrombolysis and survival rates, 370, 371
Reperfusion injury
  amlodipine beneficial actions on functional and metabolic recovery, 67–75
  lipid peroxidation enhanced by captopril and zofenopril, 437–442
  mannitol and superoxide dismutase effect in rabbits, 623–631
  as outcome of myocardial ischemia, 288
Repolarization, dofetilide mechanism of action, 429, 432, 433, 434
Reserpine
  elderly and hypertension, 580
  pretreatment to abolish increased cyclic AMP with Bay-K-8644, 602
Reverse use-dependence, dofetilide as cause of this phenomenon in guinea pigs, 429–430, 434
Rheumatoid arthritis, lobenzarit therapy, 403
Ribavirin, 9
Ridogrel, 31
  enhancing alteplase-induced reperfusion, 117
Riodipine, 38
Risk factors
  elderly and hypertension treatments, 559–562
  elderly and other than hypertension, 561
Ro 40–5967
  ischemia selectivity aided by, 22
  reducing exercise-induced regional contractile dysfunction in dogs, 167–171
  vs. verapamil, 167
RP 49356, 315
rt-PA, dose and duration (IV) influence on coronary patency, 373–377
Ryanodine, 22, 37, 38
  to abolish half of Bay-K-8644 effect on ventricular fibrillation threshold, 597–603

Salvage angioplasty, after rt-PA thrombolytic therapy, 374, 375
Sarcolemma, compositional changes in rats from atrial natriuretic peptide release in ischemia reperfusion, 447–448
Sarcolemmal calcium deposits, atrial muscle protection by mioflazine, lidoflazine, and verapamil, 51–57
Saruplase, 111
  combined IV administration with alteplase, 112
  combined IV administration with urokinase, 112–113
  hybrids, 113
  thrombus-targeted drugs, 114
  vs. taprostene, 118
SAVE trial, elderly and hypertension, 563
Scorpion toxin charybdotoxin, 315
Sea cucumber, 118
Serum buffers, 137
Serum free fatty acid (NEFA), nebivolol vs. atenolol effects during maximal and endurance exercise tests, 239–246
Serum glycerol, nebivolol vs. atenolol effects during maximal and endurance exercise tests, 239–246
Serum potassium, enalapril vs. captopril effects for malignant hypertension, 498
Severe heart failure, captopril vs. flosequinan effects, 465–470
Severe hypertension, fenoldopam (IV) effects on blood pressure, 445–446
SHEP Co-operative Research Group, 560, 561, 563–564
SHEP study, elderly and hypertension, 566–567, 571–572, 575–576, 579–582, 585–587
Short-term hibernation, 281, 282
"Sicilian Gambit," 519
Sick sinus syndrome, 139
  digitalis therapy contraindications and limitations, 460
Silent ischemia, 315
  frequency, 125–126
  prognostic factor in patients with unstable angina, 379, 382
  treatment justification in 1992, 125–128
Simvastatin, effect on high density lipoprotein subfractions and apolipoproteins in Type IIa hypercholesterolemia, 633–638
SIN-1, 119, 231
  relaxations induced by, 159, 161–164
Single-photon emission computed tomography (SPECT), 274
Sinus cycle length (SCL), 530
Sinus node inhibitor, tedisamil antiischemic effects in conscious dogs, 337–342
SK channels, 315

Smoking
  celiprolol effects on cardiovascular responses, 543–544
  diuretics for elderly with hypertension, 562
Sodium nitroprusside
  effect on dogs anesthetized with enflurane, 611–621
  vasorelaxant activity, 605–609
  vs. fenoldopam (IV) in severe hypertension, blood pressure effects, 445–446
Soldier's heart, 249–253
SOLVD study, 181
Somatostatin, to open potassium ATP channels, 315
Sotalol
  classification, 524
  potassium channel activation, 317
  vs. dofetilide, 434
SPRINT trial, 19, 20
Squalene, 105
SR 33557, 38
Stable angina
  exertional, amlodipine antianginal effects, 481–486
  monoclonal antibodies to platelet receptors, 117
  and silent ischemia, 125–127
  Total Ischemic Burden European Trial (TIBET), 379–384
  verapamil therapy in middle-aged and elderly patients, 153–158
Stable prostacyclin analogues, 111, 118
Staphylokinase, recombinant, a fibrin-specific thrombolytic drug, 113
Starling Pharmaceutical Company, milrinone trial discontinued, 16
Stop-flow pressure, diltiazem effect on hypertensive rats, 91–92
STOP-Hypertension trial (Swedish Trial in Old Patients), elderly and hypertension, 559–560, 563, 566–567, 571–572, 575, 579–582
Streptokinase
  bolus infusion, 111
  combined IV administration with alteplase, 112
  prehospital thrombolysis (intravenous) in a rural community, 369–372
Strokes
  antiplatelet therapy, 29
  prevention as main advantage of antihypertensive therapy, 579–581
Stroke volume
  atenolol vs. nebivolol, 245
  tedisamil effect, 303, 353, 359
Stroke volume index, atenolol (IV) administration, 478
Strophanthidin, intravenous administration causing unfavorable effects, 461, 462
Strophanthin, to aid identification of hibernating myocardium, 289
ST-segment depression
  amlodipine antianginal effects, 482–483, 486
  nitroglycerin (transdermal) effect on exercise tolerance, 641–642, 644–647
Sudden death
  antiarrhythmic drug therapy not a preventative, 11
  prevented by verapamil in DAVIT-II trial, 20, 22
  and silent ischemia, 126, 127
Sulfonylureas, antidiabetic, and action-potential duration, 314, 315
Sulmazole, for chronic heart failure, 16
Superoxide anion production, concentration-dependent inhibition produced by nicorandil, 225, 226, 228–230
Superoxide dismutase, effect on reperfusion injury in isolated rabbit hearts, 623–631
Suppressor/cytotoxic T-cell, lobenzarit enhancing number and function of, and myocarditis, 403–407
Supraventricular tachycardias, adenosine-sensitive receptors as intervention, 310
Survival, long-term therapy not recommended with beta-adrenergic agonists and phosphodiesterase inhibitors, 15
Swedish Secondary Prevention Trial, 133
Sympathetic activation, platelet accumulation inhibited by beta blockade in rabbit aorta, 505–510
Syncope
  associated with ventricular tachycardia, 187–188
  in vasospastic angina, 139
Synvinolin. *See* Simvastatin
Systemic hemodynamics, bimakalim vs. nicorandil cardiovascular effects in pigs, 410–413, 415–416
Syst-Eur study, elderly and hypertension, 568
Syst-Eur trial of systolic hypertension, 560, 562
Systolic function, recovery of, in hibernating myocardium, 281–283
Systolic hypertension, elderly and drug therapy, 575–576, 585–587
Systolic Hypertension in the Elderly study, 575
Systolic segment shortening (SST), during exercise cycles before and after tedisamil, 341

Taprostene, 118
$^{99m}T_c$-Sestamibi imaging, for identifying hibernating myocardium, 287, 289–290
Tedisamil
  antiarrhythmic actions studied in rats and primates, 345–351
  antiarrhythmic class III effect, 303
  antiischemic and potential antianginal properties, 303
  antiischemic effects in conscious dogs, 337–342
  effect of "pedestal"-type K^+ currents, 325
  effect on delayed-rectifier-type K^+ currents, 324
  effect on transient-type K^+ currents, 322–323
  electrophysiological specificity, 304
  hemodynamic and antiischemic effects in humans, 353–360
  modeling of interaction with voltage-dependent K^+ channels, 325–326
  mode of action in rats, 329, 335
  mode of action on voltage-dependent K^+ channels, 321–327
  single-channel effects, 326
  voltage-dependent potassium channels, 316–317
  vs. alinidine, verapamil, and propranolol therapies in rats with coronary ligation, 329–335
  vs. other potassium channel blockers, 361
Thallium 201 rest-distribution imaging, 287, 290
Thiazides, hydrochlorothiazide effect on metabolic response to adrenaline infusions, 219–223
Thiobarbituric acid reactive product (TBA-RP), ACE inhibitors causing decrease, 441
Thrombocytopenia, 117
Thrombolysis
  advances in therapy, 111–119
  rt-PA dose and duration (IV) effect, 373–377
Thrombolysis in Myocardial Infarction I Open Label Study, 376
Thrombolysis in Myocardial Infarction Phase II Pilot Study, 376
Thrombolytic therapy
  accelerated intravenous infusion of drugs, 112
  bolus administration of drugs, 111–112
  thrombus-targeted, 114–115
Thromboxane A_2, and prostaglandins, 29–30
Thromboxane receptor antagonists (TRA)
  as antiplatelet therapy, 116–117
  and thromboxane synthase inhibitors, 29–31
Thromboxane synthase inhibitors (TSI), 117
  combined with thromboxane receptor antagonists, 29–31
Tiapamil, 38
  vs. nisoldipine, 44–45
Ticks, for polypeptide inhibitors, 118
Ticlopidine
  affecting plasma fibrinogen levels, 25, 26
  with aspirin for combined antithrombotic prevention, 117
Tigramin, 118

TIMI classification, rt-PA thrombolytic therapy, 374–376
Timolol, 235
  analgesic properties in acute myocardial infarction, 258
Tocainide
  classification, 520–521, 523, 525
  mortality rate for ventricular arrhythmias, 13
Tolbutamide, to block potassium ion efflux, 315
Tolerance, nitroglycerin (transdermal) effect on exercise tolerance, 641–648
Tonic block, 307
Total ischemic burden (TIB), prognostic implications with stable angina, 379–380, 382, 384
Total Ischemic Burden European Trial (TIBET), 128, 379–384
Total mortality, reduction of, and hypercholesterolemia, 133
Total peripheral resistance (TPRI), 490
Transdermal drug delivery
  captopril in hypertensive rabbits, 589–594
  nitroglycerin effect on exercise tolerance, 641–648
Transesophageal echocardiography, principles of (book review), 452
Transplantation, ARDS development in recipients correlated to cremophor EL, 77
Treatment trials, elderly and hypertension, 579–582
Triamterene, with hydrochlorothiazide in EWPHE trial, 571, 572
Tumor necrosis factor (TNF) alpha, 25, 26

Ubiquinones, 105
UK-68,798
  dofetilide antiarrhythmic actions in guinea pigs, 429–435
  effect on action potentials in rats and guinea pigs, 345
UL-FS 49. *See* Zatebradine
U.S. National Cholesterol Education Program, 131
Unstable angina
  amlodipine effective antiischemic agent, 75
  antiplatelet therapy, 29
  aspirin, 116
  endpoint of Total Ischemic Burden European Trial (TIBET), 381, 383
  intracoronary atenolol vs. nifedipine during PTCA, 256, 257
  myocardial glucose uptake, 275
  nisoldipine effect, 45
  recovery of systolic function after coronary angioplasty, 282
  and silent ischemia, 126
Urokinase
  bolus administration, 111
  combined IV administration with alteplase, 112
  combined IV administration with saruplase, 112–113
  thrombus-targeted drugs, 114

Vagolysis, after atropine with dispyramide or its main metabolite, 535–536
Vascular smooth muscle
  cremophor EL effect in isolated rat heart, 77–82
  cyclosporin effect in isolated rat heart, 77–82
  relaxation by vasodilators, 605–609
Vasodilators, relaxation of vascular smooth muscle, 605–609
Vasospastic angina
  and recurrent long sinus arrest, 139
  and syncope, 139
Vaughan Williams class IA agents, 13, 14
Vaughan Williams class IB agents, 13, 14
Vaughan Williams classification, 519, 520, 524, 539
Vaughan Williams subclass IC of drugs, 11, 13, 14
Ventricular arrhythmias
  and amrinone therapy, 16
  atenolol vs. nifedipine intracoronary antiischemic effects, 256
  bucindolol effect, 233–236
  likelihood of serious or fatal proarrhythmia, 13, 14
  related to increased adrenaline levels, 222
Ventricular fibrillation (VF)
  Bay-K-8644 effect on threshold, 597–603
  bucindolol effect in pig hearts, 233–236
  cytosolic calcium overload, 19–22
  and early proarrhythmia, 12
  electrophysiological basis of calcium role, 20–21
  and silent ischemia, 126, 127
  tedisamil effect, 303
  UL-FS 49 (zatebradine) in pigs, 60
  verapamil for prevention, 20
Ventricular premature contractions (VPC), antiarrhythmic drug actions, 539
Ventricular premature systoles (VPS), bucindolol effect, 234, 235
Ventricular tachyarrhythmia, 12
  exacerbation by inotropic agents, 17
Ventricular tachycardia (VT)
  bepridil efficacy evaluated by electrophysiologic testing, 187–192
  bucindolol decreasing duration of, 233, 234, 235
  and early proarrhythmia, 12
  UL-FS 49 (zatebradine) in pigs, 60
Verapamil
  calcium-antagonistic action, 35, 38
  decreased efficiency of oxygen usage, 303
  effect on circulating ionized calcium, 137
  for angina pectoris in middle-aged and elderly patients, 153–158
  increasing regional segment shortening, 67, 74
  negative inotropic and/or chronotropic effects, 170
  no adverse effect on serum lipoprotein metabolism, 473
  no decreased platelet deposition, 116
  pharmacokinetics, 155–157
  postinfarct administration trials, 19–20, 22
  preventing postinfarct sudden death, 19
  protective effects against accumulation of cellular calcium in humans, rats, and guinea pigs, 47–57
  vs. mioflazine and flunarizine, 53–57
  vs. nebivolol for exercise endurance measurements, 244
  vs. Ro 40-5967, 167
  vs. tedisamil in rats with coronary ligation, 329–335
  with quinidine and ACE-inhibitor therapy, 174
Veterans Administration Cooperative Vasodilator-Heart Failure Trial (1991), 181, 582
Veterans Administration trial (original), elderly and hypertension, 575
Virus-induced myocardial injury, captopril beneficial in mice, 10
Vitronectin, 117
Voltage-operated channels, activation and function, 305, 306
Von Willebrand factor, 117–118

Water-perfusable tissue index (PTI), 276–277
Wavelength, 521
Wenckebach point, 530–533, 536
Wolff-Parkinson-White syndrome, digitalis therapy contraindications and limitations, 460
Women, and cholesterol, 134

Xamoterol, for chronic heart failure, 16
Xenopus oocytes, 317

YC-170, for chronic heart failure, 16

Zaprinast, 162, 164
Zatebradine (UL-FS 49)
  bradycardic effects on left ventricular function in pigs with chronic coronary artery occlusion, 59–64
  cardiovascular effect in pigs, 416
  as sinus-node inhibitor, 337, 341, 342
  vs. tedisamil for myocardial ischemia, 361–362
Zatebradine heart rate, in pigs with chronic coronary artery occlusion, 61–64
Zocor. *See* Simvastatin
Zofenopril, cardioprotective effects, 437–442